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DATE: Tuesday, February 08, 2005

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	L14	L11 AND antagonist	618
	L13	L11 AND L12	65
	L12	424/130.1,141.1,142.1,143.1,145.1.CCLS.	3242
	L11	MCP-1RA OR MCP-1RB OR CCR2 OR CKR2 OR MCP-1 receptor	843
	L10	Coughlin.IN.	773
	L9	Coughlin-S.IN.	773
	L8	Coughlin-Shaun.IN.	1
	L7	Coughlin-S-R.IN.	11
	L6	Coughlin-Shaun-R.IN.	26
	L5	Charo-I-R.IN.	1
	L4	Charo-Israel-R.IN.	3
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Search Results - Record(s) 1 through 8 of 8 returned.

1. Document ID: US 6806061 B1

Using default format because multiple data bases are involved.

L4: Entry 1 of 8

File: USPT

Oct 19, 2004

US-PAT-NO: 6806061

DOCUMENT-IDENTIFIER: US 6806061 B1

TITLE: G protein-coupled receptor gene and methods of use therefor

DATE-ISSUED: October 19, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Gerard; Craiq J. Dover MA Gerard; Norma P. Dover MA Mackay; Charles R. Newton Highlands MA Ponath; Paul D. Boston MA Post; Theodore W. Newton MA Qin; Shixin Lexington MA

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 435/69.7, 536/23.1

Full Title Citation Front Review Classification Date Reference Citation Claims KWC	Drawi Desi

2. Document ID: US 6413967 B1

L4: Entry 2 of 8

File: USPT

Jul 2, 2002

US-PAT-NO: 6413967

DOCUMENT-IDENTIFIER: US 6413967 B1

** See image for <u>Certificate of Correction</u> **

TITLE: Inhibition of novel calcium entry pathway in electrically non-excitable cells acting as an anti-proliferative therapy

DATE-ISSUED: July 2, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Gray; Lloyd S. Charlottesville VA Haverstick; Doris M. Charlottesville VA Densmore; John J. Charlottesville VA Szabo; Gabor Charlottesville VA

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US-CL-CURRENT: 514/252.1; 514/252.12

ABSTRACT:

The present invention provides methods for screening for voltage gated (VG)-selective inhibitors, novel VG-selective inhibitors, compositions containing the same, methods for inhibiting calcium entry into electrically non-excitable cells with said VG-selective inhibitors, methods for preventing proliferation of electrically non-excitable cells with said VG-selective inhibitors as well as methods of treating autoimmune diseases, preventing graft rejections, preventing apoptosis and treating cancer with the same.

8 Claims, 17 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 9

Full Title Citation Front	Review Classification Date	Reference	Claims KWC Draw Desi
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3. Document ID: US 6265184 B1

L4: Entry 3 of 8

File: USPT

Jul 24, 2001

US-PAT-NO: 6265184

DOCUMENT-IDENTIFIER: US 6265184 B1

TITLE: Polynucleotides encoding chemokine receptor 88C

DATE-ISSUED: July 24, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Gray; Patrick W. Seattle WA Schweickart; Vicki L. Seattle WA Raport; Carol J. Bothell WA

US-CL-CURRENT: <u>435/69.1</u>; <u>435/252.3</u>, <u>435/320.1</u>, <u>435/325</u>, <u>435/471</u>, <u>435/71.1</u>, <u>435/71.2</u>, <u>530/350</u>, <u>536/23.1</u>, <u>536/23.5</u>

ABSTRACT:

The present invention provides polynucleotides that encode the chemokine receptors 88-2B or 88C and materials and methods for the recombinant production of these two chemokine receptors. Also provided are assays utilizing the polynucleotides which facilitate the identification of ligands and modulators of the chemokine receptors. Receptor fragments, ligands, modulators, and antibodies are useful in the detection and treatment of disease states associated with the chemokine receptors such as atherosclerosis, rheumatoid arthritis, tumor growth suppression, asthma, and other inflammatory conditions.

11 Claims, 0 Drawing figures Exemplary Claim Number: 1

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4. Document ID: US 5981230 A

L4: Entry 4 of 8 File: USPT Nov 9, 1999

US-PAT-NO: 5981230

DOCUMENT-IDENTIFIER: US 5981230 A

TITLE: Polynucleotide encoding chemokine .beta.-4

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Li; Haodong Gaithersburg MD Adams; Mark D. North Potomac MD

US-CL-CURRENT: <u>435/69.5</u>; <u>435/252.3</u>, <u>435/320.1</u>, <u>435/325</u>, <u>435/471</u>, <u>435/71.2</u>, <u>530/324</u>, <u>536/23.5</u>, <u>536/24.3</u>, <u>536/24.3</u>

ABSTRACT:

Human chemokine polypeptides and DNA (RNA) encoding such chemokine polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such chemokine polypeptides for the treatment of leukemia, tumors, chronic infections, autoimmune disease, fibrotic disorders, wound healing and psoriasis. Antagonists against such chemokine polypeptides and their use as a therapeutic to treat <u>rheumatoid arthritis</u>, autoimmune and chronic inflammatory and infective diseases, allergic reactions, prostaglandinindependent fever and bone marrow failure are also disclosed. Diagnostic assays for identifying mutations in nucleic acid sequence encoding a polypeptide of the present invention and for detecting altered levels of the polypeptide of the present invention are also disclosed.

25 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 3

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5. Document ID: US 5935568 A

L4: Entry 5 of 8 File: USPT Aug 10, 1999

US-PAT-NO: 5935568

DOCUMENT-IDENTIFIER: US 5935568 A

TITLE: Gene therapy for effector cell regulation

DATE-ISSUED: August 10, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
Dow; Steve W. Denver CO
Elmslie; Robyn E. Denver CO
Potter; Terence A. Denver CO

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US-CL-CURRENT: 424/93.21; 435/375, 435/69.1, 514/44

ABSTRACT:

The present invention provides a nucleic acid-based therapeutic composition to treat an animal with disease by controlling the activity of effector cells, including T cells, macrophages, monocytes and/or natural killer cells, in the animal. Therapeutic compositions of the present invention include superantigen-encoding nucleic acid molecules, either in the presence or absence of a cytokine-encoding nucleic acid molecule and/or chemokine-encoding nucleic acid molecules, depending upon the disease being treated. The present invention also relates to an adjuvant for use with nucleic acid-based vaccines. Adjuvant compositions of the present invention include an immunogen combined with superantigen-encoding nucleic acid molecules, either in the presence or absence of a cytokine-encoding nucleic acid molecule and/or chemokine-encoding nucleic acid molecules.

28 Claims, 14 Drawing figures Exemplary Claim Number: 1,3,5 Number of Drawing Sheets: 14

Full: Title Citation Front Review Classification Date: Reference: Classification Classification Review Reference: Classification Review

6. Document ID: US 5866373 A

L4: Entry 6 of 8

File: USPT

Feb 2, 1999

US-PAT-NO: 5866373

DOCUMENT-IDENTIFIER: US 5866373 A

TITLE: Polynucleotide encoding a human chemotactic protein

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Li; Haodong Gaithersburg MD Ruben; Steven M. Olney MD Sutton, III; Granger G. Columbia MD

US-CL-CURRENT: <u>435/69.5</u>; <u>435/252.3</u>, <u>435/254.11</u>, <u>435/320.1</u>, <u>435/325</u>, <u>435/69.1</u>, <u>435/91.41</u>, <u>536/23.1</u>, <u>536/23.5</u>

ABSTRACT:

A human chemotactic protein polypeptide and DNA (RNA) encoding such polypeptide and a procedure for producing such polypeptide by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptide for preventing and/or treating for stem cell mobilization, myeloprotection and neuronal protection, to treat tumors, to promote wound healing, to combat parasitic infection and to regulate hematopoiesis. Also disclosed are antagonists against such polypeptides which may be employed to treat rheumatoid arthritis, lung inflammation, allergy, infectious diseases and to prevent inflammation and atherosclerosis. Diagnostic assays for identifying mutations in nucleic acid sequence encoding a polypeptide of the present invention and for detecting altered levels of the polypeptide of the present invention for detecting diseases are also disclosed.

25 Claims, 10 Drawing figures

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Exemplary Claim Number: 1
Number of Drawing Sheets: 8

Full Title Citation Front Review Classification Date Reference Claims KMG Drawt Des

7. Document ID: US 5668117 A

L4: Entry 7 of 8

File: USPT

Sep 16, 1997

US-PAT-NO: 5668117

DOCUMENT-IDENTIFIER: US 5668117 A

TITLE: Methods of treating neurological diseases and etiologically related symptomology using carbonyl trapping agents in combination with previously known medicaments

DATE-ISSUED: September 16, 1997

INVENTOR-INFORMATION:

NAME CITY

STATE ZIP CODE COUNTRY

Shapiro; Howard K. Narberth PA 19072

US-CL-CURRENT: $\underline{514/55}$; $\underline{436/518}$, $\underline{436/74}$, $\underline{514/1}$, $\underline{514/23}$, $\underline{514/54}$, $\underline{514/811}$, $\underline{514/866}$, $\underline{514/878}$, $\underline{514/879}$, $\underline{514/903}$, $\underline{514/912}$, $\underline{536/1.11}$, $\underline{536/20}$

ABSTRACT:

Therapeutic compositions comprising an effective amount of at least one carbonyl trapping agent alone or in combination with a therapeutically effective of a co-agent or medicament are disclosed. The compositions are used to treat a mammal suffering from a neurological disease characterized by covalent bond crosslinking between the nerve cells, other cellular structures and their intracellular and extracellular components, with disease induced carbonyl-containing aliphatic or aromatic hydrocarbons present in mammals.

29 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title Citation Front Review (Claims Reference Claims Rouce Draw Desc
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8. Document ID: US 5478848 A

L4: Entry 8 of 8

File: USPT

Dec 26, 1995

US-PAT-NO: 5478848

DOCUMENT-IDENTIFIER: US 5478848 A

TITLE: Inhibition of arthritis by L-type calcium channel antagonists nimodipine,

nisoldipine and nifedipine

DATE-ISSUED: December 26, 1995

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

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Aune; Thomas M.

Hamden

СТ

US-CL-CURRENT: <u>514/356</u>; <u>514/355</u>

ABSTRACT:

The present invention comprises new methods for treating <u>rheumatoid arthritis</u>. It has been found that the L-type calcium channel antagonists are effective in treating arthritis. Nimodipine, nisoldipine, and nifedipine, are examples of specific compounds useful in the present invention.

8 Claims, 1 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 1

Full Title Citation Front Review Classification Date	Reference Claims KWC Draw, Des-
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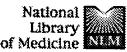
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HIV-1 tat protein induces a migratory phenotype in human fetal microglia by a CCL2 (MCP-1)-dependent mechanism: Possible role in NeuroAIDS.

Am J Pathol. 2004 Dec;165(6):2187-96.

7: Eugenin EA, Dyer G, Calderon TM, Berman JW.

PMID: 15579460 [PubMed - indexed for MEDLINE]

Related Articles, Links

Page 2 of 20 Glia. 2005 Mar;49(4):501-10. PMID: 15578658 [PubMed - in process] 8: Shen Y, Xu W, Chu YW, Wang Y, Liu QS, Xiong SD. Related Articles, Links Coxsackievirus group B type 3 infection upregulates expression of monocyte chemoattractant protein 1 in cardiac myocytes, which leads to enhanced migration of mononuclear cells in viral myocarditis. J Virol. 2004 Nov;78(22):12548-56. PMID: 15507642 [PubMed - indexed for MEDLINE] 9: Murphy HS, Sun Q, Murphy BA, Mo R, Huo J, Chen J, Chensue Related Articles, Links SW, Adams M. Richardson BC, Yung R. Tissue-specific effect of estradiol on endothelial cell-dependent lymphocyte recruitment. Microvasc Res. 2004 Nov;68(3):273-85. PMID: 15501247 [PubMed - in process] 10: Kumar MV, Nagineni CN, Chin MS, Hooks JJ, Detrick B. Related Articles, Links Innate immunity in the retina: Toll-like receptor (TLR) signaling in human retinal pigment epithelial cells. J Neuroimmunol. 2004 Aug;153(1-2):7-15. PMID: 15265658 [PubMed - indexed for MEDLINE] 11: Ishizawa K, Yoshizumi M, Tsuchiya K, Houchi H, Minakuchi K, Related Articles, Links Izawa Y, Kanematsu Y, Kagami S, Hirose M, Tamaki T. Dual effects of endothelin-1 (1-31): induction of mesangial cell migration and facilitation of monocyte recruitment through monocyte chemoattractant protein-1 production by mesangial cells. Hypertens Res. 2004 Jun;27(6):433-40. PMID: 15253109 [PubMed - indexed for MEDLINE] 12: Hiraoka M, Nitta N, Nagai M, Shimokado K, Yoshida M. Related Articles, Links MCP-1-induced enhancement of THP-1 adhesion to vascular endothelium was modulated by HMG-CoA reductase inhibitor through RhoA GTPasebut not ERK1/2-dependent pathway. Life Sci. 2004 Jul 30,75(11):1333-41. PMID: 15234191 [PubMed - indexed for MEDLINE] 13: Lappegard KT, Fung M, Bergseth G, Riesenfeld J, Mollnes TE. Related Articles, Links Artificial surface-induced cytokine synthesis: effect of heparin coating and complement inhibition. Ann Thorac Surg. 2004 Jul;78(1):38-44; discussion 44-5. PMID: 15223398 [PubMed - in process] 14: Shimizu S, Nakashima H, Masutani K, Inoue Y, Miyake K. Related Articles, Links Akahoshi M, Tanaka Y, Egashira K, Hirakata H, Otsuka T, Harada Anti-monocyte chemoattractant protein-1 gene therapy attenuates nephritis in MRL/lpr mice. Rheumatology (Oxford). 2004 Sep;43(9):1121-8. Epub 2004 Jun 22. PMID: 15213333 [PubMed - indexed for MEDLINE] 15: Kimura S, Wang KY, Tanimoto A, Murata Y, Nakashima Y, Related Articles, Links

Acute inflammatory reactions caused by histamine via monocytes/macrophages chronically participate in the initiation and progression of atherosclerosis.

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Pathol Int. 2004 Jul;54(7):465-74.

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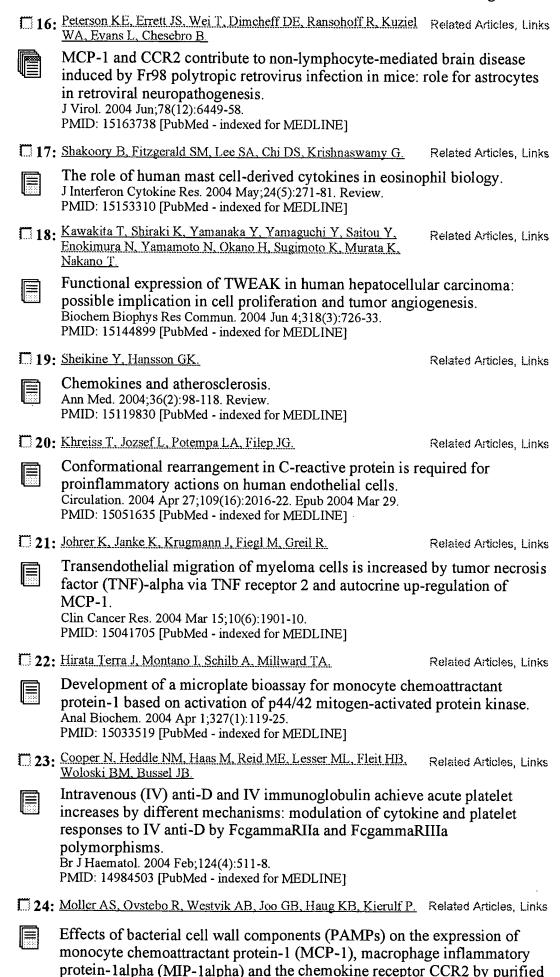
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human blood monocytes.

J Endotoxin Res. 2003;9(6):349-60.

PMID: 14733721 [PubMed - indexed for MEDLINE]

25: Parenti A, Bellik L, Brogelli L, Filippi S, Ledda F.

Related Articles, Links

Endogenous VEGF-A is responsible for mitogenic effects of MCP-1 on vascular smooth muscle cells.

Am J Physiol Heart Circ Physiol. 2004 May;286(5):H1978-84. Epub 2003 Dec 23. PMID: 14693680 [PubMed - indexed for MEDLINE]

26: Amano H, Morimoto K, Senba M, Wang H, Ishida Y, Kumatori A. Related Articles, Links Yoshimine H, Oishi K, Mukaida N, Nagatake T.

Essential contribution of monocyte chemoattractant protein-1/C-C chemokine ligand-2 to resolution and repair processes in acute bacterial pneumonia.

J Immunol. 2004 Jan 1;172(1):398-409.

PMID: 14688348 [PubMed - indexed for MEDLINE]

27: Lee L. Wang L. Wells AD. Ye Q. Han R. Dorf ME, Kuziel WA. Related Articles, Links Rollins BJ, Chen L. Hancock WW.



Blocking the monocyte chemoattractant protein-1/CCR2 chemokine pathway induces permanent survival of islet allografts through a programmed death-1 ligand-1-dependent mechanism.

J Immunol. 2003 Dec 15;171(12):6929-35.

PMID: 14662900 [PubMed - indexed for MEDLINE]

28: Christensen PJ, Du M, Moore B, Morris S. Toews GB, Paine R 3rd. Related Articles, Links



Expression and functional implications of CCR2 expression on murine alveolar epithelial cells.

Am J Physiol Lung Cell Mol Physiol. 2004 Jan;286(1):L68-72.

PMID: 14656700 [PubMed - indexed for MEDLINE]

1 29: Olszyna DP, Verbon A, Pribble JP, Turner T, Axtelle T, van Deventer SJ, van der Poll T.

Related Articles, Links

Effect of IC14, an anti-CD14 antibody, on plasma and cell-associated chemokines during human endotoxemia.

Eur Cytokine Netw. 2003 Jul-Sep;14(3):158-62.

PMID: 14656690 [PubMed - indexed for MEDLINE]

30: Massberg S. Mueller I, Besta F, Thomas P, Gawaz M.

Related Articles, Links



Effects of 2 different antiplatelet regimens with abciximab or tirofiban on platelet function in patients undergoing coronary stenting.

Am Heart J. 2003 Nov;146(5):E19.

PMID: 14597948 [PubMed - indexed for MEDLINE]

31: Kirkham PA, Spooner G, Ffoulkes-Jones C, Calvez R.

Related Articles, Links

Cigarette smoke triggers macrophage adhesion and activation: role of lipid peroxidation products and scavenger receptor.

Free Radic Biol Med. 2003 Oct 1;35(7):697-710.

PMID: 14583334 [PubMed - indexed for MEDLINE]

32: Riewald M, Petrovan RJ, Donner A, Ruf W.

Related Articles, Links

Activated protein C signals through the thrombin receptor PAR1 in endothelial cells.

J Endotoxin Res. 2003;9(5):317-21.

PMID: 14577849 [PubMed - indexed for MEDLINE]

133: Ambati J, Anand A, Fernandez S, Sakurai E, Lynn BC, Kuziel WA, Related Articles, Links Rollins BJ, Ambati BK.

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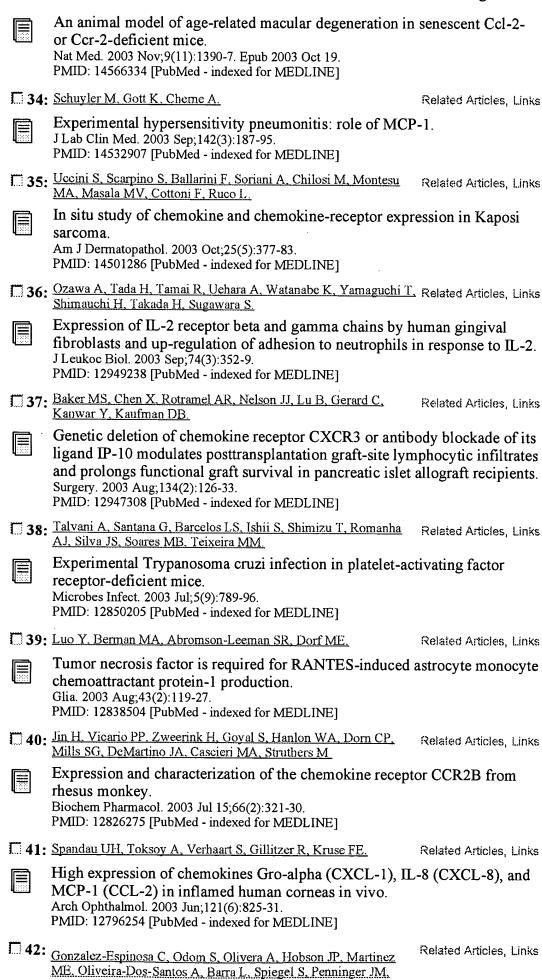
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Preferential signaling and induction of allergy-promoting lymphokines upon weak stimulation of the high affinity IgE receptor on mast cells. J Exp Med. 2003 Jun 2;197(11):1453-65.

PMID: 12782712 [PubMed - indexed for MEDLINE]

43: Wang H, Nemoto-Sasaki Y, Kondo T, Akiyama M, Mukaida N. Related Articles, Links

Potential involvement of monocyte chemoattractant protein (MCP)-1/CCL2 in IL-4-mediated tumor immunity through inducing dendritic cell migration into the draining lymph nodes.

Int Immunopharmacol. 2003 May;3(5):627-42.

PMID: 12757733 [PubMed - indexed for MEDLINE]

44: Ajuebor MN, Hogaboam CM, Le T, Swain MG.

Related Articles, Links



C-C chemokine ligand 2/monocyte chemoattractant protein-1 directly inhibits NKT cell IL-4 production and is hepatoprotective in T cellmediated hepatitis in the mouse.

J Immunol. 2003 May 15;170(10):5252-9.

PMID: 12734374 [PubMed - indexed for MEDLINE]

45: Paik YH, Schwabe RF, Bataller R, Russo MP, Jobin C. Brenner Related Articles, Links

Toll-like receptor 4 mediates inflammatory signaling by bacterial lipopolysaccharide in human hepatic stellate cells.

Hepatology. 2003 May;37(5):1043-55. PMID: 12717385 [PubMed - indexed for MEDLINE]

46: Vande Broek I, Asosingh K, Vanderkerken K, Straetmans N, Van Related Articles, Links Camp B, Van Riet I.

Chemokine receptor CCR2 is expressed by human multiple myeloma cells and mediates migration to bone marrow stromal cell-produced monocyte chemotactic proteins MCP-1, -2 and -3.

Br J Cancer. 2003 Mar 24;88(6):855-62.

PMID: 12644822 [PubMed - indexed for MEDLINE]

17. Yamaoka-Tojo M, Yamaguchi S, Nitobe J, Abe S, Inoue S, Nozaki Related Articles, Links N, Okuyama M, Sata M, Kubota I, Nakamura H, Tomoike H.

Dual response to Fas ligation in human endothelial cells: apoptosis and induction of chemokines, interleukin-8 and monocyte chemoattractant protein-1.

Coron Artery Dis. 2003 Feb;14(1):89-94.

PMID: 12629330 [PubMed - indexed for MEDLINE]

48: Papayannopoulou T, Priestley GV, Bonig H, Nakamoto B. Related Articles, Links



The role of G-protein signaling in hematopoietic stem/progenitor cell mobilization.

Blood. 2003 Jun 15;101(12):4739-47. Epub 2003 Feb 20. PMID: 12595315 [PubMed - indexed for MEDLINE]

49: Solomon MF, Kuziel WA, Mann DA, Simeonovie CJ.

Related Articles, Links

The role of chemokines and their receptors in the rejection of pig islet tissue xenografts.

Xenotransplantation. 2003 Mar;10(2):164-77.

PMID: 12588649 [PubMed - indexed for MEDLINE]

50: Nakamura R, Ishida S, Ozawa S, Saito Y, Okunuki H, Teshima R. Releted Articles, Links Sawada J.



Gene expression profiling of Ca2+-atpase inhibitor DTBHQ and antigen-

h

cb

h g е е fcg e ch

stimulated RBL-2H3 mast cells.

Inflamm Res. 2002 Dec;51(12):611-8.

PMID: 12558195 [PubMed - indexed for MEDLINE]

51: Dawson J, Miltz W, Mir AK, Wiessner C.

Related Articles, Links

Targeting monocyte chemoattractant protein-1 signalling in disease.

Expert Opin Ther Targets. 2003 Feb;7(1):35-48.

PMID: 12556201 [PubMed - in process]

52: Koyama S, Sato E, Takamizawa A, Tsukadaira A, Haniuda M, Related Articles, Links Kurai M, Numanami H, Nagai S, Izumi T

Methotrexate stimulates lung epithelial cells to release inflammatory cell chemotactic activities.

Exp Lung Res. 2003 Mar; 29(2):91-111.

PMID: 12554356 [PubMed - indexed for MEDLINE]

53: Anders HJ, Banas B, Linde Y, Weller L, Cohen CD, Kretzler M, Related Articles, Links Martin S, Vielhauer V, Schlondorff D, Grone HJ

Bacterial CpG-DNA aggravates immune complex glomerulonephritis: role of TLR9-mediated expression of chemokines and chemokine receptors. J Am Soc Nephrol. 2003 Feb;14(2):317-26.

PMID: 12538732 [PubMed - indexed for MEDLINE]

54: Yoshida M, Nakamura T, Kikuchi T, Takagi K, Matsukawa A Related Articles, Links

Expression of monocyte chemoattractant protein-1 in primary cultures of rabbit intervertebral disc cells.

J Orthop Res. 2002 Nov;20(6):1298-304.

PMID: 12472243 [PubMed - indexed for MEDLINE]

55: Harada N, Nakayama M, Nakano H, Fukuchi Y, Yagita H, Related Articles, Links Okumura K.

Pro-inflammatory effect of TWEAK/Fn14 interaction on human umbilical vein endothelial cells.

Biochem Biophys Res Commun. 2002 Dec 6;299(3):488-93. PMID: 12445828 [PubMed - indexed for MEDLINE]

56: Getchell TV, Subhedar NK, Shah DS, Hackley G, Partin JV, Sen G, Related Articles, Links Getchell ML.

Chemokine regulation of macrophage recruitment into the olfactory epithelium following target ablation: involvement of macrophage inflammatory protein-lalpha and monocyte chemoattractant protein-1. J Neurosci Res. 2002 Dec 15;70(6):784-93.

PMID: 12444600 [PubMed - indexed for MEDLINE]

57: Laudes IJ, Chu JC, Huber-Lang M, Guo RF, Riedemann NC. Related Articles, Links Sarma JV, Mahdi F, Murphy HS, Speyer C, Lu KT, Lambris JD, Zetoune FS, Ward PA

Expression and function of C5a receptor in mouse microvascular endothelial cells.

J Immunol. 2002 Nov 15;169(10):5962-70. PMID: 12421982 [PubMed - indexed for MEDLINE]

58: Maus U, Henning S, Wenschuh H, Mayer K, Seeger W, Lohmeyer Related Articles, Links

Role of endothelial MCP-1 in monocyte adhesion to inflamed human endothelium under physiological flow.

Am J Physiol Heart Circ Physiol. 2002 Dec;283(6):H2584-91. Epub 2002 Aug 29. PMID: 12388329 [PubMed - indexed for MEDLINE]

59: Fuentes L, Hernandez M, Fernandez-Aviles FJ, Crespo MS, Nieto Related Articles, Links ML.

h

cb

h g е е fcg e ch



Cooperation between secretory phospholipase A2 and TNF-receptor superfamily signaling: implications for the inflammatory response in atherogenesis.

Circ Res. 2002 Oct 18;91(8):681-8.

PMID: 12386144 [PubMed - indexed for MEDLINE]

60: Wolf G, Jocks T, Zahner G, Panzer U, Stahl RA

Related Articles, Links



Existence of a regulatory loop between MCP-1 and TGF-beta in glomerular immune injury.

Am J Physiol Renal Physiol. 2002 Nov;283(5):F1075-84. PMID: 12372783 [PubMed - indexed for MEDLINE]

61: Inagaki Y, Yamagishi S, Amano S, Okamoto T, Koga K, Makita Z. Related Articles, Links

Interferon-gamma-induced apoptosis and activation of THP-1 macrophages.

Life Sci. 2002 Oct 11;71(21):2499-508.

PMID: 12270755 [PubMed - indexed for MEDLINE]

62: Maus U, von Grote K, Kuziel WA, Mack M, Miller EJ, Cihak J, Stangassinger M, Maus R, Schlondorff D, Seeger W, Lohmeyer J



The role of CC chemokine receptor 2 in alveolar monocyte and neutrophil immigration in intact mice.

Am J Respir Crit Care Med. 2002 Aug 1;166(3):268-73. PMID: 12153956 [PubMed - indexed for MEDLINE]

63: Nakayama M, Yoshida E, Sugiki M, Anai K, Maruyama M, Mihara Related Articles, Links H.



Up-regulation of the urokinase-type plasminogen activator receptor by monocyte chemotactic proteins.

Blood Coagul Fibrinolysis. 2002 Jul;13(5):383-91. PMID: 12138365 [PubMed - indexed for MEDLINE]

64: Wang L, Li Y, Chen J, Gautam SC, Zhang Z, Lu M, Chopp M. Related Articles, Links



Ischemic cerebral tissue and MCP-1 enhance rat bone marrow stromal cell migration in interface culture.

Exp Hematol. 2002 Jul;30(7):831-6.

PMID: 12135683 [PubMed - indexed for MEDLINE]

65: Furukawa K, Kobayashi M, Herndon DN, Pollard RB, Suzuki F. Related Articles, Links



Appearance of monocyte chemoattractant protein 1 (MCP-1) early after thermal injury: role in the subsequent development of burn-associated type 2 T-cell responses.

Ann Surg. 2002 Jul;236(1):112-9.

PMID: 12131093 [PubMed - indexed for MEDLINE]

66: Panzer U, Schneider A, Guan Y, Reinking R, Zahner G, Harendza Related Articles, Links S, Wolf G, Thaiss F, Stahl RA



Effects of different PPARgamma-agonists on MCP-1 expression and monocyte recruitment in experimental glomerulonephritis.

Kidney Int. 2002 Aug;62(2):455-64.

PMID: 12110006 [PubMed - indexed for MEDLINE]

67: Chiu BC, Chensue SW.

Related Articles, Links



Chemokine responses in schistosomal antigen-elicited granuloma formation.

Parasite Immunol. 2002 Jun;24(6):285-94.

PMID: 12102713 [PubMed - indexed for MEDLINE]

68: Patterson AM, Siddall H, Chamberlain G, Gardner L, Middleton J. Related Articles, Links

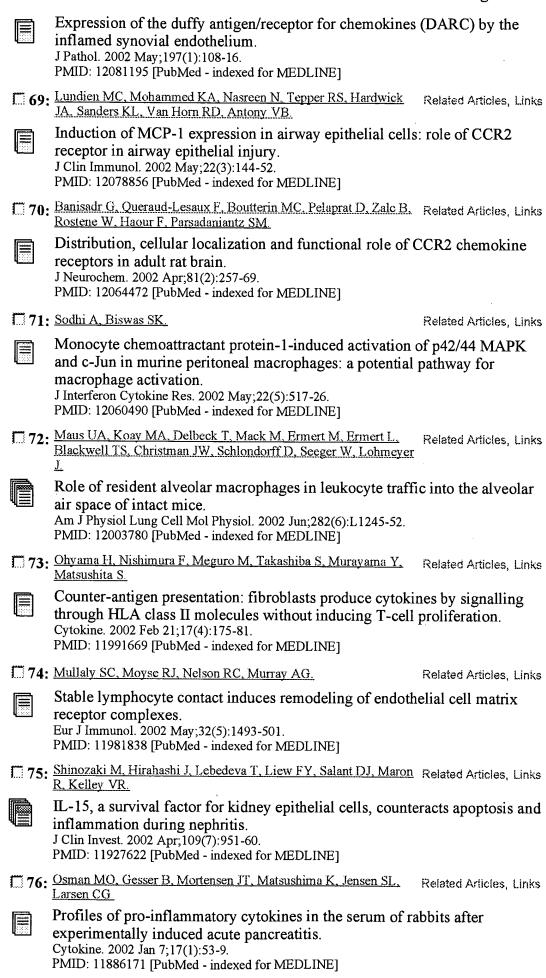
h

ch

h g

fcg

e ch



77: Horvath C. Welt FG, Nedelman M, Rao P, Rogers C. Related Articles, Links Targeting CCR2 or CD18 inhibits experimental in-stent restenosis in primates: inhibitory potential depends on type of injury and leukocytes targeted. Circ Res. 2002 Mar 8;90(4):488-94. PMID: 11884380 [PubMed - indexed for MEDLINE] 78: Segura M, Vadeboncoeur N, Gottschalk M. Related Articles, Links CD14-dependent and -independent cytokine and chemokine production by human THP-1 monocytes stimulated by Streptococcus suis capsular type 2. Clin Exp Immunol. 2002 Feb;127(2):243-54. PMID: 11876746 [PubMed - indexed for MEDLINE] 79: Chen X, Mellon RD, Yang L, Dong H, Oppenheim JJ, Howard Related Articles, Links Regulatory effects of deoxycholic acid, a component of the antiinflammatory traditional Chinese medicine Niuhuang, on human leukocyte response to chemoattractants. Biochem Pharmacol. 2002 Feb 1:63(3):533-41. PMID: 11853704 [PubMed - indexed for MEDLINE] 80: Wenzel UO, Thaiss F, Helmchen U, Stahl RA, Wolf G. Related Articles, Links Angiotensin II infusion ameliorates the early phase of a mesangioproliferative glomerulonephritis. Kidney Int. 2002 Mar;61(3):1020-9. PMID: 11849457 [PubMed - indexed for MEDLINE] 81: Husson H, Carideo EG, Cardoso AA, Lugli SM, Neuberg D, Related Articles, Links Munoz O, de Leval L, Schultze J, Freedman AS. MCP-1 modulates chemotaxis by follicular lymphoma cells. Br J Haematol. 2001 Dec;115(3):554-62. PMID: 11736935 [PubMed - indexed for MEDLINE] 82: Penido C, Castro-Faria-Neto HC, Vieira-de-Abreu A, Figueiredo Related Articles, Links RT, Pelled A, Martins MA, Jose PJ, Williams TJ, Bozza PT. LPS induces eosinophil migration via CCR3 signaling through a mechanism independent of RANTES and Eotaxin. Am J Respir Cell Mol Biol. 2001 Dec;25(6):707-16. PMID: 11726396 [PubMed - indexed for MEDLINE] 83: Dunzendorfer S, Kaneider NC, Kaser A, Woell E, Frade JM. Related Articles, Links Mellado M, Martinez-Alonso C, Wiedermann CJ. Functional expression of chemokine receptor 2 by normal human eosinophils. J Allergy Clin Immunol. 2001 Oct;108(4):581-7. PMID: 11590385 [PubMed - indexed for MEDLINE] 84: Martinelli R, Sabroe I, LaRosa G, Williams TJ, Pease JE. Related Articles, Links The CC chemokine eotaxin (CCL11) is a partial agonist of CC chemokine receptor 2b. J Biol Chem. 2001 Nov 16;276(46):42957-64. Epub 2001 Sep 14. PMID: 11559700 [PubMed - indexed for MEDLINE] 85: Beck CG, Studer C, Zuber JF, Demange BJ, Manning U, Urfer R. Related Articles, Links The viral CC chemokine-binding protein vCCI inhibits monocyte chemoattractant protein-1 activity by masking its CCR2B-binding site. J Biol Chem. 2001 Nov 16;276(46):43270-6. Epub 2001 Sep 10. PMID: 11551937 [PubMed - indexed for MEDLINE]

h

cb

hg

e e

e fcg

86: Dol F, Martin G, Staels B, Mares AM, Cazaubon C, Nisato D, Related Articles, Links Bidouard JP, Janiak P, Schaeffer P, Herbert JM. Angiotensin AT1 receptor antagonist irbesartan decreases lesion size, chemokine expression, and macrophage accumulation in apolipoprotein Edeficient mice. J Cardiovasc Pharmacol. 2001 Sep;38(3):395-405. PMID: 11486244 [PubMed - indexed for MEDLINE] 87: Watanabe T, Pakala R, Katagiri T, Benedict CR. Related Articles, Links Monocyte chemotactic protein 1 amplifies serotonin-induced vascular smooth muscle cell proliferation. J Vasc Res. 2001 Jul-Aug;38(4):341-9. PMID: 11455205 [PubMed - indexed for MEDLINE] 88: Ohtsuki K, Hayase M, Akashi K, Kopiwoda S, Strauss HW. Related Articles, Links Detection of monocyte chemoattractant protein-1 receptor expression in experimental atherosclerotic lesions: an autoradiographic study. Circulation. 2001 Jul 10;104(2):203-8. PMID: 11447087 [PubMed - indexed for MEDLINE] 89. Yokochi S, Hashimoto H, Ishiwata Y, Shimokawa H, Haino M. Related Articles, Links Terashima Y, Matsushima K. An anti-inflammatory drug, propagermanium, may target GPI-anchored proteins associated with an MCP-1 receptor, CCR2. J Interferon Cytokine Res. 2001 Jun;21(6):389-98. PMID: 11440636 [PubMed - indexed for MEDLINE] 1 90: Watanabe Y, Hashizume M, Kataoka S, Hamaguchi E, Morimoto Related Articles, Links N, Tsuru S, Katoh S, Miyake K, Matsushima K, Tominaga M, Kurashige T. Fujimoto S. Kincade PW. Tominaga A. Differentiation stages of eosinophils characterized by hyaluronic acid binding via CD44 and responsiveness to stimuli. DNA Cell Biol. 2001 Apr;20(4):189-202. PMID: 11403716 [PubMed - indexed for MEDLINE] 1191: Fillion I, Ouellet N, Simard M, Bergeron Y, Sato S, Bergeron MG. Related Articles, Links Role of chemokines and formyl peptides in pneumococcal pneumoniainduced monocyte/macrophage recruitment. J Immunol. 2001 Jun 15;166(12):7353-61. PMID: 11390486 [PubMed - indexed for MEDLINE] 92: Russell WJ, Cardelli J, Harris E, Baier RJ, Herrera GA. Related Articles, Links Monoclonal light chain-mesangial cell interactions: early signaling events and subsequent pathologic effects. Lab Invest. 2001 May;81(5):689-703. PMID: 11351041 [PubMed - indexed for MEDLINE] 93: Oliveira SH, Lukacs NW. Related Articles, Links Stem cell factor and igE-stimulated murine mast cells produce chemokines (CCL2, CCL17, CCL22) and express chemokine receptors. Inflamm Res. 2001 Mar; 50(3):168-74. PMID: 11339505 [PubMed - indexed for MEDLINE] 1 94: Kaji M, Ikari M, Hashiguchi S, Ito Y, Matsumoto R, Yoshimura T. Related Articles, Links Kuratsu Ji, Sugimura K Peptide mimics of monocyte chemoattractant protein-1 (MCP-1) with an antagonistic activity. J Biochem (Tokyo). 2001 Apr;129(4):577-83. PMID: 11275557 [PubMed - indexed for MEDLINE]

b e

e ch

95: Rovin BH, Lu L, Marsh CB. Related Articles, Links Lymphocytes induce monocyte chemoattractant protein-1 production by renal cells after Fc gamma receptor cross-linking; role of IL-1beta. J Leukoc Biol. 2001 Mar;69(3):435-9. PMID: 11261791 [PubMed - indexed for MEDLINE] 96: Huang DR, Wang J, Kivisakk P, Rollins BJ, Ransohoff RM Related Articles, Links Absence of monocyte chemoattractant protein 1 in mice leads to decreased local macrophage recruitment and antigen-specific T helper cell type 1 immune response in experimental autoimmune encephalomyelitis. J Exp Med. 2001 Mar 19;193(6):713-26. PMID: 11257138 [PubMed - indexed for MEDLINE] 97: Corrigall VM, Arastu M. Khan S, Shah C, Fife M, Smeets T, Tak Related Articles, Links PP, Panayi GS Functional IL-2 receptor beta (CD122) and gamma (CD132) chains are expressed by fibroblast-like synoviocytes: activation by IL-2 stimulates monocyte chemoattractant protein-1 production. J Immunol. 2001 Mar 15;166(6):4141-7. PMID: 11238664 [PubMed - indexed for MEDLINE] 1 98: Tang KF, Tan SY, Chan SH, Chong SM, Loh KS, Tan LK, Hu H. Related Articles, Links A distinct expression of CC chemokines by macrophages in nasopharyngeal carcinoma: implication for the intense tumor infiltration by T lymphocytes and macrophages. Hum Pathol. 2001 Jan; 32(1):42-9. PMID: 11172294 [PubMed - indexed for MEDLINE] 99: Inngjerdingen M, Damaj B, Maghazachi AA. Related Articles, Links Expression and regulation of chemokine receptors in human natural killer cells. Blood. 2001 Jan 15;97(2):367-75. PMID: 11154210 [PubMed - indexed for MEDLINE] 100: Singhal PC, Gupta S, Sharma P, Shah H, Shah N, Patel P. Related Articles, Links Receptor mediated endocytosis by mesangial cells modulates transmigration of macrophages. Inflammation. 2000 Dec;24(6):519-32. PMID: 11128050 [PubMed - indexed for MEDLINE] 101: Fujisawa T, Kato Y, Nagase H, Atsuta J, Terada A, Iguchi K, Related Articles, Links Kamiya H, Morita Y, Kitaura M, Kawasaki H, Yoshie O, Hirai K. Chemokines induce eosinophil degranulation through CCR-3. J Allergy Clin Immunol. 2000 Sep; 106(3):507-13. PMID: 10984371 [PubMed - indexed for MEDLINE] 102: Simpson J, Rezaie P, Newcombe J, Cuzner ML, Male D. Related Articles, Links Woodroofe MN. Expression of the beta-chemokine receptors CCR2, CCR3 and CCR5 in multiple sclerosis central nervous system tissue. J Neuroimmunol. 2000 Aug 1;108(1-2):192-200. PMID: 10900353 [PubMed - indexed for MEDLINE] 103: Zhang W, Smith C, Howlett C, Stanimirovic D. Related Articles, Links Inflammatory activation of human brain endothelial cells by hypoxic astrocytes in vitro is mediated by IL-1beta. J Cereb Blood Flow Metab. 2000 Jun; 20(6):967-78.

n cb hgeeefcg ech be

PMID: 10894180 [PubMed - indexed for MEDLINE]

h

cb

h g

е

104: Salcedo R, Ponce ML, Young HA, Wasserman K, Ward JM, Related Articles, Links Kleinman HK, Oppenheim JJ, Murphy WJ. Human endothelial cells express CCR2 and respond to MCP-1: direct role of MCP-1 in angiogenesis and tumor progression. Blood. 2000 Jul 1;96(1):34-40. PMID: 10891427 [PubMed - indexed for MEDLINE] 105; Schadde E, Kretzler M, Banas B, Luckow B, Assmann K. Related Articles, Links Schlondorff D. Expression of chemokines and their receptors in nephrotoxic serum nephritis. Nephrol Dial Transplant. 2000 Jul; 15(7):1046-53. PMID: 10862646 [PubMed - indexed for MEDLINE] 106: Drakes ML, Zahorchak AF, Takayama T, Lu L, Thomson AW. Related Articles, Links Chemokine and chemokine receptor expression by liver-derived dendritic cells: MIP-1alpha production is induced by bacterial lipopolysaccharide and interaction with allogeneic T cells. Transpl Immunol. 2000 Mar;8(1):17-29. PMID: 10834607 [PubMed - indexed for MEDLINE] 107: Grandaliano G, Monno R, Ranieri E, Gesualdo L, Schena FP, Related Articles, Links Martino C, Ursi M Regenerative and proinflammatory effects of thrombin on human proximal tubular cells. J Am Soc Nephrol. 2000 Jun;11(6):1016-25. PMID: 10820165 [PubMed - indexed for MEDLINE] 108: Hogaboam CM, Bone-Larson CL, Steinhauser ML, Matsukawa A, Related Articles, Links Gosling J. Boring L. Charo IF, Simpson KJ, Lukacs NW, Kunkel SL. Exaggerated hepatic injury due to acetaminophen challenge in mice lacking C-C chemokine receptor 2. Am J Pathol. 2000 Apr; 156(4): 1245-52. PMID: 10751350 [PubMed - indexed for MEDLINE] 109: Meta A. Torigoe N. Ito Y. Arakaki R. Nakashima H. Sugimura K. Related Articles, Links Inhibition of M-tropic HIV-1 infection by the fd phage-gene 3 protein with MIP-1alpha-binding activity. Mol Immunol. 1999 Dec;36(18):1249-54. PMID: 10684964 [PubMed - indexed for MEDLINE] 110: Reyes-Reyna SM, Krolick KA. Related Articles, Links Chemokine production by rat myocytes exposed to interferon-gamma. Clin Immunol. 2000 Feb;94(2):105-13. PMID: 10637095 [PubMed - indexed for MEDLINE] 111: Bird JE, Giancarli MR, Kurihara T, Kowala MC, Valentine MT, Related Articles, Links Gitlitz PH, Pandya DG, French MH, Durham SK Increased severity of glomerulonephritis in C-C chemokine receptor 2 knockout mice. Kidney Int. 2000 Jan;57(1):129-36. PMID: 10620194 [PubMed - indexed for MEDLINE] 112: Lugering N, Kucharzik T, Maaser C, Kraft M, Domschke W. Related Articles, Links Interleukin-15 strongly inhibits interleukin-8 and monocyte chemoattractant protein-1 production in human colonic epithelial cells. Immunology. 1999 Dec; 98(4): 504-9. PMID: 10594681 [PubMed - indexed for MEDLINE]

b e

e ch

fcg

113: Topham PS, Csizmadia V, Soler D, Hines D, Gerard CJ, Salant Related Articles, Links DJ, Hancock WW. Lack of chemokine receptor CCR1 enhances Th1 responses and glomerular injury during nephrotoxic nephritis. J Clin Invest. 1999 Dec; 104(11): 1549-57. PMID: 10587518 [PubMed - indexed for MEDLINE] 114: Sabri F, Tresoldi E, Di Stefano M, Polo S, Monaco MC, Verani Related Articles, Links A, Fiore JR, Lusso P, Major E, Chiodi F, Scarlatti G. Nonproductive human immunodeficiency virus type 1 infection of human fetal astrocytes: independence from CD4 and major chemokine receptors. Virology. 1999 Nov 25;264(2):370-84. PMID: 10562499 [PubMed - indexed for MEDLINE] 115: Dekkers PE, Levi M, van Deventer SJ, van der Poll T. Related Articles, Links Divergent roles of tumor necrosis factor and platelet-activating factor in endotoxin-induced release of monocyte chemoattractant protein 1 and macrophage inflammatory protein 1beta in chimpanzees. Infect Immun. 1999 Oct;67(10):5480-2. PMID: 10496934 [PubMed - indexed for MEDLINE] 116: Higgins GC, Wu Y, Postlethwaite AE. Related Articles, Links Intracellular IL-1 receptor antagonist is elevated in human dermal fibroblasts that overexpress intracellular precursor IL-1 alpha. J Immunol. 1999 Oct 1;163(7):3969-75. PMID: 10490999 [PubMed - indexed for MEDLINE] 117: Weber KS, Nelson PJ, Grone HJ, Weber C. Related Articles, Links Expression of CCR2 by endothelial cells: implications for MCP-1 mediated wound injury repair and In vivo inflammatory activation of endothelium. Arterioscler Thromb Vasc Biol. 1999 Sep; 19(9): 2085-93. PMID: 10479649 [PubMed - indexed for MEDLINE] 118: Yoong KF, Afford SC, Jones R, Aujla P, Qin S, Price K, Related Articles, Links Hubscher SG, Adams DH. Expression and function of CXC and CC chemokines in human malignant liver tumors: a role for human monokine induced by gamma-interferon in lymphocyte recruitment to hepatocellular carcinoma. Hepatology, 1999 Jul;30(1):100-11. PMID: 10385645 [PubMed - indexed for MEDLINE] 119: Koyama S, Sato E, Nomura H, Kubo K, Miura M, Yamashita T, Related Articles, Links Nagai S, Izumi T. Monocyte chemotactic factors released from type II pneumocyte-like cells in response to TNF-alpha and IL-1alpha. Eur Respir J. 1999 Apr;13(4):820-8. PMID: 10362047 [PubMed - indexed for MEDLINE] 120: Andjelkovic AV, Spencer DD, Pachter JS. Related Articles, Links Visualization of chemokine binding sites on human brain microvessels. J Cell Biol. 1999 Apr 19;145(2):403-12. PMID: 10209033 [PubMed - indexed for MEDLINE] 121: Rodriguez-Frade JM, Vila-Coro AJ, de Ana AM, Albar JP, Related Articles, Links Martinez-A C, Mellado M. The chemokine monocyte chemoattractant protein-1 induces functional

responses through dimerization of its receptor CCR2. Proc Natl Acad Sci U S A. 1999 Mar 30;96(7):3628-33.

h cb hg e e e fcg e ch

PMID: 10097088 [PubMed - indexed for MEDLINE] 122: Boykins RA, Oravecz T, Unsworth E, Syin C. Related Articles, Links

Chemical synthesis and characterization of chemokine RANTES and its analogues.

Cytokine. 1999 Jan;11(1):8-15.

PMID: 10080874 [PubMed - indexed for MEDLINE]

123: Mo JS, Matsukawa A, Ohkawara S, Yoshinaga M.

Related Articles, Links

Role and regulation of IL-8 and MCP-1 in LPS-induced uveitis in rabbits. Exp Eye Res. 1999 Mar;68(3):333-40.

PMID: 10079141 [PubMed - indexed for MEDLINE]

124: Gosset P, Tillie-Leblond I, Oudin S, Parmentier O, Wallaert B, Related Articles, Links Joseph M. Tonnel AB.

Production of chemokines and proinflammatory and antiinflammatory cytokines by human alveolar macrophages activated by IgE receptors. J Allergy Clin Immunol. 1999 Feb; 103(2 Pt 1):289-97. PMID: 9949321 [PubMed - indexed for MEDLINE]

125: van den Berg RH, Faber-Krol MC, Sim RB, Daha MR. Related Articles, Links

The first subcomponent of complement, Clq, triggers the production of IL-8, IL-6, and monocyte chemoattractant peptide-1 by human umbilical vein endothelial cells.

J Immunol. 1998 Dec 15;161(12):6924-30.

PMID: 9862726 [PubMed - indexed for MEDLINE]

126: Han KH, Tangirala RK, Green SR, Quehenberger O.

Related Articles, Links

Chemokine receptor CCR2 expression and monocyte chemoattractant protein-1-mediated chemotaxis in human monocytes. A regulatory role for plasma LDL.

Arterioscler Thromb Vasc Biol. 1998 Dec;18(12):1983-91. PMID: 9848893 [PubMed - indexed for MEDLINE]

127: Masubuchi T, Koyama S, Sato E, Takamizawa A, Kubo K, Related Articles, Links Sekiguchi M, Nagai S, Izumi T

Smoke extract stimulates lung epithelial cells to release neutrophil and monocyte chemotactic activity. Am J Pathol. 1998 Dec; 153(6):1903-12.

PMID: 9846980 [PubMed - indexed for MEDLINE]

128: Koyama S, Sato E, Nomura H, Kubo K, Miura M, Yamashita T, Related Articles, Links Nagai S. Izumi T.

Bradykinin stimulates type II alveolar cells to release neutrophil and monocyte chemotactic activity and inflammatory cytokines. Am J Pathol. 1998 Dec; 153(6):1885-93.

PMID: 9846978 [PubMed - indexed for MEDLINE]

☐ **129:** Braun M. Davis AE 3rd.

Related Articles, Links

Cultured human glomerular mesangial cells express the C5a receptor. Kidney Int. 1998 Nov;54(5):1542-9. PMID: 9844130 [PubMed - indexed for MEDLINE]

130: Bliss CM Jr, Golenbock DT, Keates S, Linevsky JK, Kelly CP. Related Articles, Links

Helicobacter pylori lipopolysaccharide binds to CD14 and stimulates release of interleukin-8, epithelial neutrophil-activating peptide 78, and monocyte chemotactic protein 1 by human monocytes. Infect Immun. 1998 Nov;66(11):5357-63.

PMID: 9784544 [PubMed - indexed for MEDLINE]

131: Ajuebor MN, Gibbs L, Flower RJ, Das AM, Perretti M. Related Articles, Links Investigation of the functional role played by the chemokine monocyte chemoattractant protein-1 in interleukin-1-induced murine peritonitis. Br J Pharmacol. 1998 Sep; 125(2):319-26. PMID: 9786504 [PubMed - indexed for MEDLINE] 132: Matsukawa A, Miyazaki S, Maeda T, Tanase S, Feng L, Related Articles, Links Ohkawara S, Yoshinaga M, Yoshimura T. Production and regulation of monocyte chemoattractant protein-1 in lipopolysaccharide- or monosodium urate crystal-induced arthritis in rabbits: roles of tumor necrosis factor alpha, interleukin-1, and interleukin-Lab Invest. 1998 Aug;78(8):973-85. PMID: 9714185 [PubMed - indexed for MEDLINE] 133: Koyama S, Sato E, Masubuchi T, Takamizawa A, Nomura H, Related Articles, Links Kubo K, Nagai S, Izumi T. Human lung fibroblasts release chemokinetic activity for monocytes constitutively. Am J Physiol. 1998 Aug;275(2 Pt 1):L223-30. PMID: 9700081 [PubMed - indexed for MEDLINE] 134: Hadida F. Vieillard V, Autran B, Clark-Lewis I, Baggiolini M, Related Articles, Links Debre P. HIV-specific T cell cytotoxicity mediated by RANTES via the chemokine receptor CCR3. J Exp Med. 1998 Aug 3;188(3):609-14. PMID: 9687538 [PubMed - indexed for MEDLINE] 135: Gonzalo JA, Lloyd CM, Wen D, Albar JP, Wells TN, Proudfoot Related Articles, Links A. Martinez-A C. Dorf M. Bjerke T. Covle AJ, Gutierrez-Ramos The coordinated action of CC chemokines in the lung orchestrates allergic inflammation and airway hyperresponsiveness. J Exp Med. 1998 Jul 6;188(1):157-67. PMID: 9653092 [PubMed - indexed for MEDLINE] 136: Kasahara T, Oda T, Hatake K, Akiyama M, Mukaida N, Related Articles, Links Matsushima K. Interleukin-8 and monocyte chemotactic protein-1 production by a human glioblastoma cell line, T98G in coculture with monocytes: involvement of monocyte-derived interleukin-1alpha. Eur Cytokine Netw. 1998 Mar;9(1):47-55. PMID: 9613677 [PubMed - indexed for MEDLINE] 137: Wolf G, Schneider A, Helmchen U, Stahl RA Related Articles, Links AT1-receptor antagonists abolish glomerular MCP-1 expression in a model of mesangial proliferative glomerulonephritis. Exp Nephrol. 1998 Mar-Apr;6(2):112-20. PMID: 9567217 [PubMed - indexed for MEDLINE] 138: Frade JM, Mellado M, del Real G, Gutierrez-Ramos JC, Lind P, Related Articles, Links Martinez-A C. Characterization of the CCR2 chemokine receptor: functional CCR2 receptor expression in B cells. J Immunol. 1997 Dec 1;159(11):5576-84. PMID: 9548499 [PubMed - indexed for MEDLINE] 139: Jocks T, Freudenberg J, Zahner G, Stahl RA. Related Articles, Links

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Platelet-activating factor mediates monocyte chemoattractant protein-1 expression in glomerular immune injury.

Nephrol Dial Transplant. 1998 Jan; 13(1):37-43. PMID: 9481713 [PubMed - indexed for MEDLINE]

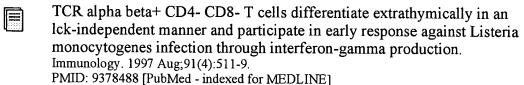
140: Baghestanian M, Hofbauer R, Kiener HP, Bankl HC, Wimazal F. Related Articles, Links Willheim M, Scheiner O, Fureder W, Muller MR, Bevec D, Lechner K, Valent P.



The c-kit ligand stem cell factor and anti-IgE promote expression of monocyte chemoattractant protein-1 in human lung mast cells. Blood. 1997 Dec 1;90(11):4438-49.

PMID: 9373254 [PubMed - indexed for MEDLINE]

141: Kadena T, Matsuzaki G, Fujise S, Kishihara K, Takimoto H. Related Articles, Links Sasaki M, Beppu M, Nakamura S, Nomoto K



142: Duque N, Gomez-Guerrero C, Egido J.

Related Articles, Links

Interaction of IgA with Fc alpha receptors of human mesangial cells activates transcription factor nuclear factor-kappa B and induces expression and synthesis of monocyte chemoattractant protein-1, IL-8, and IFN-inducible protein 10.

J Immunol. 1997 Oct 1;159(7):3474-82.

PMID: 9317146 [PubMed - indexed for MEDLINE]

143: Hancock WW, Miyatake T, Koyamada N, Kut JP. Soares M, Related Articles, Links Russell ME, Bach FH, Savegh MH.

Effects of leflunomide and deoxyspergualin in the guinea pig-->rat cardiac model of delayed xenograft rejection: suppression of B cell and C-C chemokine responses but not induction of macrophage lectin. Transplantation. 1997 Sep 15;64(5):696-704. Erratum in: Transplantation 1997 Oct 27;64 (8):1225.

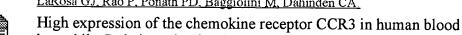
PMID: 9311705 [PubMed - indexed for MEDLINE]

1144: Goebeler M, Schnarr B, Toksoy A, Kunz M, Brocker EB, Duschl Related Articles, Links A, Gillitzer R

Interleukin-13 selectively induces monocyte chemoattractant protein-1 synthesis and secretion by human endothelial cells. Involvement of IL-4R alpha and Stat6 phosphorylation. Immunology. 1997 Jul;91(3):450-7.

PMID: 9301536 [PubMed - indexed for MEDLINE]

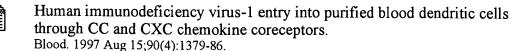
145: Uguccioni M, Mackay CR, Ochensberger B, Loetscher P, Rhis S. Related Articles, Links LaRosa GJ, Rao P, Ponath PD, Baggiolini M, Dahinden CA.



basophils. Role in activation by eotaxin, MCP-4, and other chemokines. J Clin Invest. 1997 Sep 1;100(5):1137-43.

PMID: 9276730 [PubMed - indexed for MEDLINE]

146: Ayehunie S, Garcia-Zepeda EA, Hoxie JA, Horuk R, Kupper TS, Related Articles, Links Luster AD, Ruprecht RM.



PMID: 9269754 [PubMed - indexed for MEDLINE]

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147 :	Cross AK, Richardson V, Ali SA, Palmer I, Taub DD, Rees RC.	Related Articles, Links
	Migration responses of human monocytic cell lines to a chemokines. Cytokine. 1997 Jul;9(7):521-8. PMID: 9237815 [PubMed - indexed for MEDLINE]	lpha- and beta-
148 :	Koyama S, Sato E, Nomura H, Kubo K, Nagai S, Izumi T.	Related Articles, Links
	Type II pneumocytes release chemoattractant activity for constitutively. Am J Physiol. 1997 May;272(5 Pt 1):L830-7. PMID: 9176245 [PubMed - indexed for MEDLINE]	or monocytes
149 :	Marsh CB, Wewers MD, Tan LC, Rovin BH.	Related Articles, Links
****	Fc(gamma) receptor cross-linking induces peripheral bl cell monocyte chemoattractant protein-1 expression: rol Fc(gamma)RIII. J Immunol. 1997 Feb 1;158(3):1078-84. PMID: 9013945 [PubMed - indexed for MEDLINE]	
150 :	MacDermott RP.	Related Articles, Links
	Alterations of the mucosal immune system in inflamma J Gastroenterol. 1996 Dec;31(6):907-16. Review. PMID: 9027661 [PubMed - indexed for MEDLINE]	tory bowel disease.
☐ 151:	Redl H. Schlag G, Paul E, Bahrami S, Buurman WA, Strieter RM, Kunkel SL. Davies J, Foulkes R.	Related Articles, Links
	Endogenous modulators of TNF and IL-1 response are control of TNF in baboon bacteremia. Am J Physiol. 1996 Nov;271(5 Pt 2):R1193-8. PMID: 8945953 [PubMed - indexed for MEDLINE]	under partial
□ 152:	Santamaria Babi LF, Moser B, Perez Soler MT, Moser R, Loetscher P, Villiger B, Blaser K, Hauser C	Related Articles, Links
	The interleukin-8 receptor B and CXC chemokines can transendothelial migration of human skin homing T cell Eur J Immunol. 1996 Sep;26(9):2056-61. PMID: 8814246 [PubMed - indexed for MEDLINE]	
□ 153:	Heesen M. Tanabe S. Berman MA, Yoshizawa I. Luo Y, Kim RJ, Post TW, Gerard C. Dorf ME.	Related Articles, Links
	Mouse astrocytes respond to the chemokines MCP-1 and transcriptase-polymerase chain reaction does not detect or new MCP-1 receptor. J Neurosci Res. 1996 Aug 15;45(4):382-91. PMID: 8872898 [PubMed - indexed for MEDLINE]	
□ 154:	Kranzhofer R, Clinton SK, Ishii K, Coughlin SR. Fenton JW 2nd, Libby P.	Related Articles, Links
	Thrombin potently stimulates cytokine production in hu smooth muscle cells but not in mononuclear phagocytes Circ Res. 1996 Aug;79(2):286-94. PMID: 8756006 [PubMed - indexed for MEDLINE]	man vascular
□ 155:	Gharace-Kermani M, Denholm EM, Phan SH.	Related Articles, Links
	Costimulation of fibroblast collagen and transforming g gene expression by monocyte chemoattractant protein-1 receptors. J Biol Chem. 1996 Jul 26;271(30):17779-84.	

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PMID: 8663511 [PubMed - indexed for MEDLINE] 156: Tam FW, Karkar AM, Smith J, Yoshimura T, Steinkasserer A, Related Articles, Links Kurrle R. Langner K, Rees AJ. Differential expression of macrophage inflammatory protein-2 and = monocyte chemoattractant protein-1 in experimental glomerulonephritis. Kidney Int. 1996 Mar;49(3):715-21. PMID: 8648912 [PubMed - indexed for MEDLINE] 157: Oin S, LaRosa G, Campbell JJ, Smith-Heath H, Kassam N, Shi X, Related Articles, Links Zeng L. Buthcher EC, Mackay CR Expression of monocyte chemoattractant protein-1 and interleukin-8 receptors on subsets of T cells: correlation with transendothelial chemotactic potential. Eur J Immunol. 1996 Mar;26(3):640-7. PMID: 8605932 [PubMed - indexed for MEDLINE] 158: Lu ZH, Wang ZX, Horuk R, Hesselgesser J, Lou YC, Hadley TJ. Related Articles, Links Peiper SC. The promiscuous chemokine binding profile of the Duffy antigen/receptor for chemokines is primarily localized to sequences in the amino-terminal J Biol Chem. 1995 Nov 3;270(44):26239-45. PMID: 7592830 [PubMed - indexed for MEDLINE] 159: Taub DD, Sayers TJ, Carter CR, Ortaldo JR. Related Articles, Links Alpha and beta chemokines induce NK cell migration and enhance NKmediated cytolysis. J Immunol. 1995 Oct 15;155(8):3877-88. PMID: 7561094 [PubMed - indexed for MEDLINE] 160: Horuk R, Wang ZX, Peiper SC, Hesselgesser J. Related Articles, Links Identification and characterization of a promiscuous chemokine-binding protein in a human erythroleukemic cell line. J Biol Chem. 1994 Jul 1;269(26):17730-3. PMID: 7517400 [PubMed - indexed for MEDLINE] 161: Tang WW. Feng L, Mathison JC, Wilson CB. Related Articles, Links Cytokine expression, upregulation of intercellular adhesion molecule-1. and leukocyte infiltration in experimental tubulointerstitial nephritis. Lab Invest. 1994 May;70(5):631-8. PMID: 7910873 [PubMed - indexed for MEDLINE] 162: Barna BP, Pettay J, Barnett GH, Zhou P, Iwasaki K, Estes ML. Related Articles, Links Regulation of monocyte chemoattractant protein-1 expression in adult human non-neoplastic astrocytes is sensitive to tumor necrosis factor (TNF) or antibody to the 55-kDa TNF receptor. J Neuroimmunol. 1994 Feb;50(1):101-7. PMID: 8300851 [PubMed - indexed for MEDLINE] 163: Rovin BH, Yoshiumura T, Tan L. Related Articles, Links Cytokine-induced production of monocyte chemoattractant protein-1 by cultured human mesangial cells. J Immunol. 1992 Apr 1;148(7):2148-53. PMID: 1532001 [PubMed - indexed for MEDLINE] 164: Hora K, Satriano JA, Santiago A, Mori T, Stanley ER, Shan Z. Related Articles, Links Schlondorff D. Receptors for IgG complexes activate synthesis of monocyte



chemoattractant peptide 1 and colony-stimulating factor 1. Proc Natl Acad Sci U S A. 1992 Mar 1;89(5):1745-9.

PMID: 1542668 [PubMed - indexed for MEDLINE]

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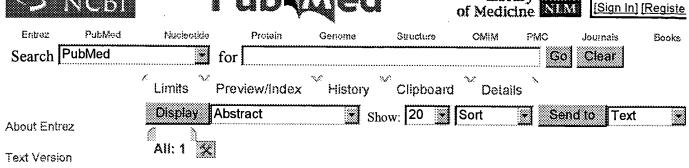
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1: Lab Invest. 1994 May; 70(5):631-8.

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Cytokine expression, upregulation of intercellular adhesion molecule-1, and leukocyte infiltration in experimental tubulointerstitial nephritis.

Tang WW, Feng L, Mathison JC, Wilson CB.

Department of Immunology, Scripps Research Institute, La Jolla, California.

BACKGROUND: Cytokines are intercellular polypeptide messengers that mediate immune and inflammatory responses. The temporal profile of interleukin-1 beta (IL-1 beta), IL-6, tumor necrosis factor alpha (TNF-alpha), and monocyte chemotactic protein 1 (MCP-1) expression was examined in anti-tubular basement membrane (TBM) antibody-associated tubulointerstitial nephritis (TIN). EXPERIMENTAL DESIGN: TIN was induced by immunization of Brown Norway rats with bovine cortical TBM, whereas control rats received ovalbumin. Whole kidney RNA was assessed with the RNase protection assay 3, 7, 8, 9, 10, 12, and 14 days after immunization. Cytokine mRNA expression was correlated with TNF-alpha bioactivity, renal intercellular adhesion molecule-1 expression, and CD18-positive leukocyte infiltration by immunohistochemistry. RESULTS: Increased IL-1 beta, TNFalpha, and MCP-1 mRNA relative to glyceraldehyde-3-phosphate dehydrogenase appeared on day 7 when TIN involved 10 to 40% of the cortex, and peaked rapidly on day 8 when there was 60 to 80% cortical involvement (at which time 75 to 80% of the infiltrating cells were neutrophils). The increase in TNF-alpha mRNA correlated with increased bioactivity. The influx of mononuclear cells on day 8 was preceded by the expression of MCP-1 mRNA. The infiltrating leukocytes expressed the leukocyte beta 2-integrin (CD18) and were found in areas with increased intercellular adhesion molecule-1 expression. The mRNAs for IL-1 beta, TNF-alpha, and MCP-1 were undetectable by day 10 (at which time 95% of the infiltrating cells were mononuclear). An increase in IL-1 receptor antagonist mRNA paralleled those of IL-1 beta. The expression of IL-6 mRNA was similar to that for \mathbb{L} -1, except that it disappeared by day 9. CONCLUSIONS: There is a temporal association in the expression of IL-1 beta, TNF alpha, MCP-1, and IL-6 with the upregulation of intercellular adhesion molecule-1 and leukocyte infiltration within the tubulointerstitium in anti-TBM antibody-associated TIN. The narrow window of time through which these cytokines are expressed and the coincidence of their peak expression on day 8 suggest complex cytokine interactions in the pathogenesis of anti-TBM antibody TIN.

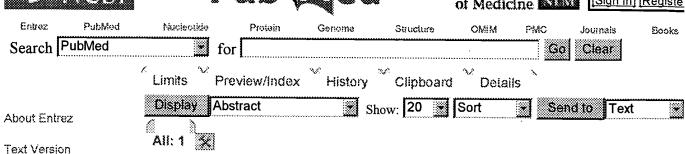
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Identification and characterization of a promiscuous chemokinebinding protein in a human erythroleukemic cell line.

Horuk R, Wang ZX, Peiper SC, Hesselgesser J.

Department of Protein Chemistry, Genentech Inc., South San Francisco, California 94080.

The erythrocyte chemokine receptor is a cell surface protein that binds a wide array of chemokines including interleukin-8 (IL-8), melanoma growth stimulating activity (MGSA), monocyte chemotactic protein-1 (MCP-1), and RANTES (Regulated on Activation, Normal T Expressed and Secreted). This protein has also been identified as the Duffy blood group antigen, a cell surface receptor for the malarial parasite Plasmodium vivax. In the present study, we have identified a chemokine receptor-like binding protein in a human erythroleukemic cell line (HEL), which, based on its molecular properties, may be related to the erythrocyte chemokine receptor. Saturation binding studies with 125I-IL-8 revealed a single class of IL-8 binding sites in HEL cells with a KD of 7.4 +/- 1.9 nM and a receptor density of 12,818 +/-965 binding sites/cell. In competition studies unlabeled IL-8 MGSA, MCP-1, and RANTES were fully able to inhibit the binding of 125I-IL-8 to HEL cells. Chemical cross-linking with radiolabeled IL-8 resulted in a cross-linked species of 60 kDa in membranes from HEL cells. The labeling was specific since it was inhibited by pre-incubation with 1 microM unlabeled IL-8 or MGSA. A monoclonal antibody (Fy6) to the human erythrocyte Duffy blood group antigen/chemokine receptor blocked the binding of IL-8 and other chemokines to the HEL cell chemokine receptor-like binding protein. Cell membranes from HEL cells and from erythrocyte ghosts were subjected to SDS-PAGE and analyzed by Western blotting with anti-Fy6. The antibody bound to a molecule with a molecular mass of 50 kDa in HEL cell membranes and 40 kDa in erythrocyte ghosts. Northern blot analysis of mRNA revealed that the HEL chemokine-binding protein hybridized to a cDNA probe to the Duffy antigen/chemokine receptor.

PMID: 7517400 [PubMed - indexed for MEDLINE]

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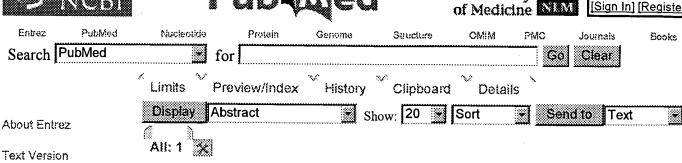
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1: Kidney Int. 1996 Mar; 49(3):715-21.

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Differential expression of macrophage inflammatory protein-2 and monocyte chemoattractant protein-1 in experimental glomerulonephritis.

Tam FW, Karkar AM, Smith J, Yoshimura T, Steinkasserer A, Kurrle R, Langner K, Rees AJ.

Department of Medicine, Royal Postgraduate Medical School, Hammersmith Hospital, London, England, United Kingdom.

We examined the relation between glomerular expression of chemokines from alpha-subfamily (macrophage inflammatory protein-2, MIP-2) and betasubfamily (monocyte chemoattractant protein-1, MCP-1) and infiltration of neutrophils and monocytes in antibody mediated glomerulonephritis in rats. In the accelerated model of nephrotoxic nephritis (NTN), glomerular expression of MIP-2 and MCP-1 genes correlated with the sequential migration of neutrophil and monocyte influx, respectively. These relationships were investigated further in the heterologous phase of NTN by applying various treatments known to modulate the severity of injury. Pretreatment with bacterial lipopolysaccharide resulted in greater injury, MIP-2 expression increased 25- to 50-fold, and the glomerular neutrophil count increased twoto fourfold. Both MIP-2 mRNA levels and neutrophil infiltration were reduced by additional pretreatment with IL-6, IL-1 receptor antagonist, soluble IL-1 receptor or soluble TNF receptor (Spearman correlation coefficient r = 0.897, P < 0.005). In the heterologous phase of NTN, different pre-treatments only resulted in trivial changes in MCP-1 expression and monocyte infiltration. In conclusion, glomerular MIP-2 gene expression correlates with neutrophil infiltration both temporally during the evolution of nephritis, and when glomerular injury is modified by treatment. Glomerular MCP-1 gene expression correlates with monocyte influx. The data show chemokines of alpha- and beta-subfamilies co-operative to cause selective and sequential migration of different leukocyte subsets during development of antibody mediated glomerulonephritis.

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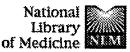
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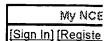
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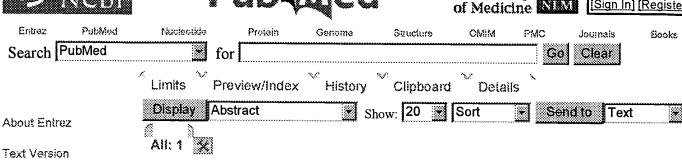
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Alterations of the mucosal immune system in inflammatory bowel disease.

MacDermott RP.

Gastroenterology Section, Lahey Hitchcock Medical Center, Burlington, MA 01805, USA.

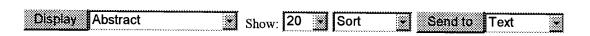
The normal intestinal immune system is under a balance in which proinflammatory and anti-inflammatory cells and molecules are carefully regulated to promote a normal host mucosal defense capability without destruction of intestinal tissue. Once this careful regulatory balance is disturbed, nonspecific stimulation and activation can lead to increased amounts of potent destructive immunologica and inflammatory molecules being produced and released. The concept of balance and regulation of normal mucosal immune and inflammatory events is indicative of how close the intestine is to developing severe inflammation. The normal intestinal mucosal immune system is constantly stimulated by lumenal contents and bacteria. The stimulatory molecules present in the intestinal lumen that activate and induce subsequent mucosal immunologic and inflammatory events include bacterial cell wall products, such as peptidoglycans and lipopolysaccharides, as well as other chemotactic and toxic bacterial products that are produced by the many different types of bacteria within the gastrointestinal tract. These highly stimulatory bacterial cell wall products are capable of activating macrophages and T lymphocytes to release potent proinflammatory cytokines, including interleukin-1 (IL-1), interleukin-6 (IL-6), and tumor necrosis factor alpha (TNF-alpha). IL-1, IL-6, and TNF-alpha increase the presence of human leukocyte antigen (HLA) class II antigen-presenting molecules on the surfaces of epithelial cells, endothelial cells, macrophages, and B cells, thus increasing their ability to present lumenal antigens and bacterial products. The proinflammatory cytokines IL-1 and TNF-alpha also increase the ability of epithelial cells, endothelial cells, macrophages, and fibroblasts to secrete potent chemotactic cytokines, such as interleukin-8 (IL-8) and monocyte chemoattractant protein-1 (MCP-1), which serve to increase the movement of macrophages and granulocytes from the circulation into the inflamed mucosa. Thus, through lumenal exposure to potent, nonspecific stimulatory bacterial products, the state of activation of the intestinal immune system and mucosal inflammatory pathways are markedly up-regulated. This raises the question of whether there is a deficiency in effective down-regulation through the absence of normally suppressive cytokines such as interleukin-10 (IL-10),

transforming growth factor-beta (TGF-beta), interleukin-4 (IL-4), and IL-1 receptor antagonist. Normally, the turning off of the active and destructive immunologic and inflammatory events should occur following the resolution of a bacterial or viral infection that has been appropriately defended against and controlled by the mucosal immune system. In inflammatory bowel disease (IBD), however, the down-regulatory events and processes that should turn of the immunologic and inflammatory protective processes, once the pathogenic agent has been cleared, appear to be deficient or only partially effective. We may find that we ultimately are dealing with disease processes that have more than one genetic or cellular basis. The improved understanding of the immunopathophysiology of IBD will allow exploration of novel immunologic and genetic approaches, such as gene replacement therapy, administration of a suppressor cytokine or an altered cell surface antigen, the administration of humanized monoclonal antibodies directed against proinflammatory cytokines, or the development of newer strategies against fundamental cell biologic mechanisms such as adhesion molecules.

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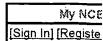
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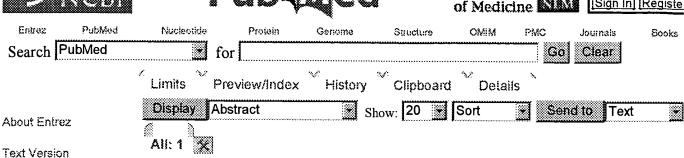
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The coordinated action of CC chemokines in the lung orchestrates allergic inflammation and airway hyperresponsiveness.

Gonzalo JA, Lloyd CM, Wen D, Albar JP, Wells TN, Proudfoot A, Martinez-A C, Dorf M, Bjerke T, Coyle AJ, Gutierrez-Ramos JC.

Millennium Pharmaceuticals, Inc., Cambridge, Massachusetts 02139, USA.

The complex pathophysiology of lung allergic inflammation and bronchial hyperresponsiveness (BHR) that characterize asthma is achieved by the regulated accumulation and activation of different leukocyte subsets in the lung. The development and maintenance of these processes correlate with the coordinated production of chemokines. Here, we have assessed the role that different chemokines play in lung allergic inflammation and BHR by blocking their activities in vivo. Our results show that blockage of each one of these chemokines reduces both lung leukocyte infiltration and BHR in a substantially different way. Thus, eotaxin neutralization reduces specifically BHR and lung eosinophilia transiently after each antigen exposure. Monocyte chemoattractant protein (MCP)-5 neutralization abolishes BHR not by affecting the accumulation of inflammatory leukocytes in the airways, but rather by altering the trafficking of the eosinophils and other leukocytes through the lung interstitium. Neutralization of RANTES (regulated upon activation, normal T cell expressed and secreted) receptor(s) with a receptor antagonist decreases significantly lymphocyte and eosinophil infiltration as well as mRNA expression of eotaxin and RANTES. In contrast, neutralization of one of the ligands for RANTES receptors, macrophage-inflammatory protein 1alpha, reduces only slightly lung eosinophilia and BHR. Finally, MCP-1 neutralization diminishes drastically BHR and inflammation, and this correlates with a pronounced decrease in monocyte- and lymphocyte-derived inflammatory mediators. These results suggest that different chemokines activate different cellular and molecular pathways that in a coordinated fashion contribute to the complex pathophysiology of asthma, and that their individual blockage results in intervention at different levels of these processes.

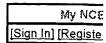
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1: Rheumatology (Oxford). 2004 Sep;43(9):1121-8. Epub 2004 Jun 22.

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Anti-monocyte chemoattractant protein-1 gene therapy attenuates nephritis in MRL/lpr mice.

Shimizu S, Nakashima H, Masutani K, Inoue Y, Miyake K, Akahoshi M, Tanaka Y, Egashira K, Hirakata H, Otsuka T, Harada M.

Department of Medicine and Biosystemic Science, Graduate School of Medical Sciences, Kyushu University, Fukuoka, 812-8582, Japan.

OBJECTIVE: Monocyte chemoattractant protein-1 (MCP-1) is up-regulated and recruits and activates inflammatory cells in human diffuse proliferative lupus nephritis (DPLN) and in nephritis of lupus model MRL/lpr mice. The aim of this study was to examine whether anti-MCP-1 gene therapy inhibits the progression of nephritis in MRL/lpr mice. METHOD: An NH(2)-terminal deletion mutant of the MCP-1 gene, 7ND, was injected into skeletal muscles of MRL/lpr mice with advanced stage nephritis to blockade MCP-1 and its receptor (CCR2) signalling pathway. RESULT: Histological findings of kidneys in treated mice, which received more than four injections of 7ND, showed that protection against renal injury resulted from reduced infiltration of leucocytes. Therefore, this therapy has been shown to prolong the life span of MRL/lpr mice. CONCLUSION: Anti-MCP-1 gene therapy is specifically effective in the localized inflammatory region. The data presented here indicate that this anti-MCP-1 gene therapy may be effective adjunct in the management of DPLN.

PMID: 15213333 [PubMed - indexed for MEDLINE]

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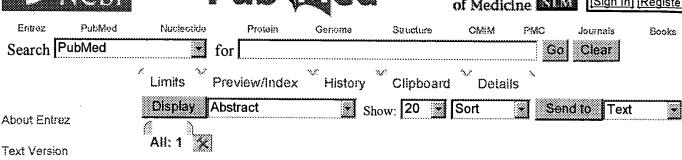
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Sheikine Y, Hansson GK.

Center for Molecular Medicine, Cardiovascular Research Unit, Karolinska Institute, Stockholm, Sweden. yuri.sheikine@cmm.ki.se

Atherosclerosis is an inflammatory disease of the vessel wall, characterized by the accumulation of leukocytes, especially macrophages and T-cells. Chemokines are small heparin-binding polypeptides, whose main function is to attract cells to the areas of developing inflammation. They function by ligating G-protein coupled chemokine receptors initiating different signaling cascades. In vivo and in vitro investigations showed that chemokines are produced by a variety of cells and play important roles in the development and progression of many physiological and pathological conditions including atherosclerosis. Chemokines such as MCP-1, MCP-4, MIP-1 and RANTES may mediate leukocyte trafficking to, and their retention in, the plaque while CXCL16 seems to fulfill the dual function of a chemokine and a scavenger receptor. Chemokine and chemokine receptor homologues are secreted by several viruses, which may also play a role in the pathogenesis of atherosclerosis. Expression levels and gene polymorphisms of some chemokines may become useful clinical markers of atherosclerosis and other cardiovascular diseases. Modulation of chemokines and chemokine receptors' expression as well as their signaling pathways may provide important antiatherogenic strategies.

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PMID: 15119830 [PubMed - indexed for MEDLINE]

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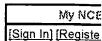
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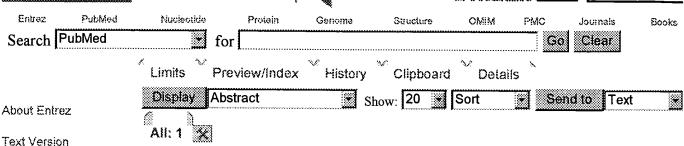
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1: J Lab Clin Med. 2003 Sep;142(3):187-95.

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FULL-TEXT ARTICLE

Experimental hypersensitivity pneumonitis: role of MCP-1.

Schuyler M, Gott K, Cherne A.

Department of Medicine, Albequerque Veterans Affairs Medical Center, University of New Mexico, 87108, USA.

Inhalation of Saccharopolyspora rectivirgula causes "farmer's lung" disease, a classic example of hypersensitivity pneumonitis (HP). Monocyte chemoattractant protein-1 (MCP-1) is increased in the bronchoalveolar lavage fluid of mice challenged with S rectivirgula, and S rectivirgula induces MCP-1 secretion by alveolar macrophages. We tested the hypothesis that MCP-1 and its receptor CC chemokine receptor-2 (CCR2) are essential to the development of experimental HP by treating mice with MCP-1 antibody and using CCR2(-/-) mice. Administration of anti-MCP-1 did not change the response to intratracheally administered S rectivirgula. CCR2(-/-) animals responded in a fashion similar to that of wild-type animals to intratracheally administered. S rectivirgula. To determine the influence of the MCP-1-CCR2 interaction in vitro, we transferred S rectivirgula-cultured spleen cells from S rectivirgula-sensitized mice, to naive recipients. Later, challenge of the recipients with intratracheal S rectivirgula and examination of both lung histology and bronchoalveolar lavage fluid characteristics were used to determine whether adoptive transfer had occurred. We found that cultured cells from CCR2(-/-) animals were fully capable of adoptive transfer. We conclude that interaction of MCP-1 with CCR2 is not necessary for the development of pulmonary inflammation in response to intratracheally administered S rectivirgula or cells able to adoptively transfer experimental HP.

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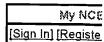
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Targeting CCR2 or CD18 inhibits experimental in-stent restenosis in primates: inhibitory potential depends on type of injury and leukocytes targeted.

Horvath C, Welt FG, Nedelman M, Rao P, Rogers C.

Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA.

A central role for leukocytes in neointimal hyperplasia after arterial injury is suspected. However, the relative importance of neutrophils and monocytes in balloon or stent-induced injury are not well understood, and mechanistic targeting of leukocyte recruitment or function is crude. We determined the temporal and spatial distribution of different leukocytes after balloon and stent-induced injury in primate iliac arteries. Based on these data, we targeted neutrophil and monocyte recruitment selectively after angioplasty or stent implantation and demonstrated that monocyte-specific blockade achieved via blockade of the MCP-1 receptor CCR2, was effective at reducing neointimal hyperplasia after stenting. In contrast, combined neutrophil and monocyte blockade achieved by targeting the leukocyte beta(2)-integrin beta-subunit CD18 was required to reduce neointimal hyperplasia after balloon injury. Distinct patterns of leukocyte infiltration in balloon versus stent-injured arteries predict distinct mechanisms for antiinflammatory strategies targeting neutrophils or monocytes in primates and may assist design of effective clinical strategies for optimizing vascular interventions.

PMID: 11884380 [PubMed - indexed for MEDLINE]

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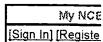
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1: J Interferon Cytokine Res. 2001 Jun;21(6):389-98.

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An anti-inflammatory drug, propagermanium, may target GPIanchored proteins associated with an MCP-1 receptor, CCR2.

Yokochi S, Hashimoto H, Ishiwata Y, Shimokawa H, Haino M, Terashima Y, Matsushima K.

Central Research Laboratory, Sanwa Kagaku Kenkyusho Co., Ltd., Hokuseicho, Inabe-gun, Mie 511-0406, Japan.

Monocyte chemoattractant protein-1 (MCP-1) promotes the migration and activation of monocytes and plays a pivotal role in the development of chronic inflammation. Propagermanium (3-oxygermylpropionic acid polymer) has been used as a therapeutic agent against chronic hepatitis B in Japan. We report here that propagermanium specifically inhibits in vitro chemotactic migration of monocytes by MCP-1. Propagermanium did not inhibit binding of MCP-1 to a human monocytic cell line, THP-1 cells, or affect intracellular Ca(2+) mobilization or the cAMP concentration in MCP-1-treated THP-1 cells. The effect of propagermanium seems to require glycosylphosphatidylinositol (GPI)-anchored proteins, as cleavage of GPI anchors by phosphatidylinositol-phospholipase C (PI-PLC) eliminated the inhibitory activity of propagermanium. Anti-GPI-anchored protein antibodies, such as anti-CD55 and anti-CD59, reduced staining of C-C chemokine receptor 2 (CCR2) with an anti-CCR2 antibody against the N-terminus of CCR2 in a flow cytometric analysis, and these antibodies also selectively inhibited MCP-1-induced migration of THP-1 cells. Furthermore, under fluorescence microscopy, GPI-anchored proteins colocalized with CCR2 on THP-1 cells. These results suggest that propagermanium may target GPIanchored proteins that are closely associated with CCR2 to selectively inhibit the MCP-1-induced chemotaxis, thus providing a mechanistic basis for the anti-inflammatory effects of the drug.

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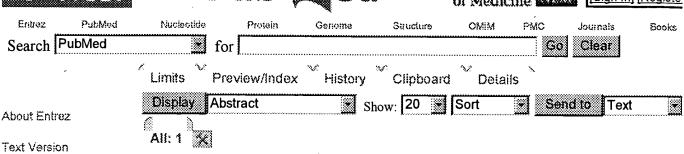
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Peptide mimics of monocyte chemoattractant protein-1 (MCP-1) with an antagonistic activity.

Kaji M, Ikari M, Hashiguchi S, Ito Y, Matsumoto R, Yoshimura T, Kuratsu Ji, Sugimura K.

Department of Bioengineering, Faculty of Engineering, Kagoshima University, Korimoto, Kagoshima 890-0065, Japan.

In this study, we attempted to analyze the peptide motifs recognized by 24822.111 and F9, monoclonal antibodies (mAbs) that inhibit the chemotactic activity of monocyte chemoattractant protein-1 (MCP-1), a member of the CC subfamily of chemokines. We isolated phage clones from a phage display library and identified six peptide motifs. One of these clones, C27, was strongly and specifically recognized by 24822.111 mAb, while another, G25, was similarly recognized by F9 mAb. Both the C27 motif and the G25 motif contain two cysteines in their sequences and have little homology to the primary amino acid sequence of MCP-1. These clones, however, bound to THP-1 cells, and the binding was competitively inhibited by MCP-1. The clones strongly inhibited the MCP-1-induced chemotaxis of human monocytes. The synthetic and intramolecularly disulfide-linked peptides of C27 and G25 (sC27 and sG25) also inhibited the chemotaxis induced by MCP-1, while their derivatives with serine in place of cysteine did not. suggesting the importance of the loop structure for the inhibition. These results suggest that sC27 and sG25 may mimic the MCP-1-binding domain to the MCP-1 receptor.

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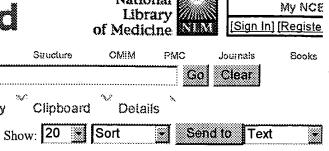


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Peptide mimics of monocyte chemoattractant protein-1 (MCP-1) with an antagonistic activity.

Kaji M, Ikari M, Hashiguchi S, Ito Y, Matsumoto R, Yoshimura T, Kuratsu Ji, Sugimura K.

Department of Bioengineering, Faculty of Engineering, Kagoshima University, Korimoto, Kagoshima 890-0065, Japan.

In this study, we attempted to analyze the peptide motifs recognized by 24822.111 and F9, monoclonal antibodies (mAbs) that inhibit the chemotactic activity of monocyte chemoattractant protein-1 (MCP-1), a member of the CC subfamily of chemokines. We isolated phage clones from a phage display library and identified six peptide motifs. One of these clones, C27, was strongly and specifically recognized by 24822.111 mAb, while another, G25, was similarly recognized by F9 mAb. Both the C27 motif and the G25 motif contain two cysteines in their sequences and have little homology to the primary amino acid sequence of MCP-1. These clones, however, bound to THP-1 cells, and the binding was competitively inhibited by MCP-1. The clones strongly inhibited the MCP-1-induced chemotaxis of human monocytes. The synthetic and intramolecularly disulfide-linked peptides of C27 and G25 (sC27 and sG25) also inhibited the chemotaxis induced by MCP-1, while their derivatives with serine in place of cysteine did not, suggesting the importance of the loop structure for the inhibition. These results suggest that sC27 and sG25 may mimic the MCP-1-binding domain to the MCP-1 receptor.

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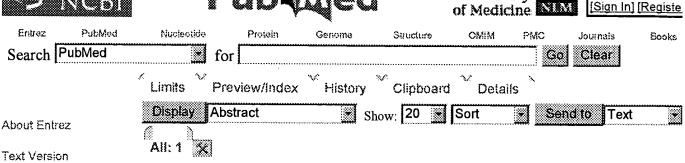
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1: J Neuroimmunol. 2000 Aug 1;108(1-2):192-200.

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FULL-TEXY ARTICLE

Expression of the beta-chemokine receptors CCR2, CCR3 and CCR5 in multiple sclerosis central nervous system tissue.

Simpson J, Rezaie P, Newcombe J, Cuzner ML, Male D, Woodroofe MN.

Biomedical Research Centre and Division of Biomedical Sciences, Sheffield Hallam University, City Campus, Pond Street, South Yorkshire, S1 1WB, Sheffield, UK.

Multiple sclerosis (MS) is an inflammatory demyelinating disease of the central nervous system (CNS) characterised by perivascular inflammatory cell infiltrates and plaques of demyelination. Chemokines have been shown to play an important role in the activation and directional migration of cells to sites of CNS inflammation. The action of chemokines requires the expression of their complementary chemokine receptors by their target cells. We have examined the expression of the beta-chemokine receptors CCR2, CCR3 and CCR5 in post-mortem MS CNS tissue using single- and double-labelling immunocytochemistry techniques. Low levels of CCR2, CCR3 and CCR5 were expressed by microglial cells throughout control CNS tissue. In chronic active MS lesions CCR2, CCR3 and CCR5 were associated with foamy macrophages and activated microglia. CCR2 and CCR5 were also present on large numbers of infiltrating lymphocytes. A smaller number of CCR3positive lymphocytes were present, but we also noted CCR3 and CCR5 on astrocytes in five of the 14 cases of MS investigated, particularly associated with processes around vessels and at the glia limitans. Ligands for CCR2 and CCR3 include MCP-1 and MCP-3 which were co-localised around vessels with the infiltrating leukocytes, but were also present in unaffected areas of cortex. The elevated expression of CCR2, CCR3 and CCR5 in the CNS in MS suggests these beta-chemokine receptors and their ligands play a role in the pathogenesis of MS.

PMID: 10900353 [PubMed - indexed for MEDLINE]

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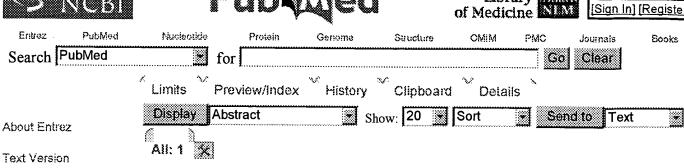
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□ 1: Blood. 2000 Jul 1;96(1):34-40.

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Human endothelial cells express CCR2 and respond to MCP-1: direct role of MCP-1 in angiogenesis and tumor progression.

Salcedo R, Ponce ML, Young HA, Wasserman K, Ward JM, Kleinman HK, Oppenheim JJ, Murphy WJ.

Laboratory of Molecular Immunoregulation, Laboratory of Experimental Immunology, Division of Basic Sciences; Intramural Research Support Program, SAIC, Frederick, MD, USA.

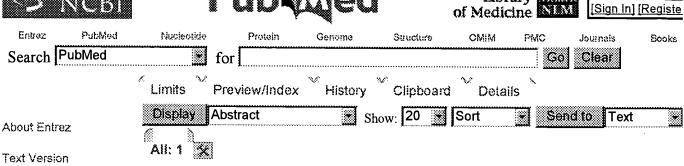
Although several CXC chemokines have been shown to induce angiogenesis and play roles in tumor growth, to date, no member of the CC chemokine family has been reported to play a direct role in angiogenesis. Here we report that the CC chemokine, monocyte chemotactic protein 1 (MCP-1), induced chemotaxis of human endothelial cells at nanomolar concentrations. This chemotactic response was inhibited by a monoclonal antibody to MCP-1. MCP-1 also induced the formation of blood vessels in vivo as assessed by the chick chorioallantoic membrane and the matrigel plug assays. As expected, the angiogenic response induced by MCP-1 was accompanied by an inflammatory response. With the use of a rat aortic sprouting assay in the absence of leukocytic infiltrates, we ruled out the possibility that the angiogenic effect of MCP-1 depended on leukocyte products. Moreover, the direct effect of MCP-1 on angiogenesis was consistent with the expression of CCR2, the receptor for MCP-1, on endothelial cells. Assessment of supernatant from a human breast carcinoma cell line demonstrated the production of MCP-1. Treatment of immunodeficient mice bearing human breast carcinoma cells with a neutralizing antibody to MCP-1 resulted in significant increases in survival and inhibition of the growth of lung micrometastases. Taken together, our data indicate that MCP-1 can act as a direct mediator of angiogenesis. As a chemokine that is abundantly produced by some tumors, it can also directly contribute to tumor progression. Therefore, therapy employing antagonists of MCP-1 in combination with other inhibitors of angiogenesis may achieve more comprehensive inhibition of tumor growth.

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1: Am J Pathol. 2000 Apr; 156(4): 1245-52.

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Exaggerated hepatic injury due to acetaminophen challenge in mice lacking C-C chemokine receptor 2.

Hogaboam CM, Bone-Larson CL, Steinhauser ML, Matsukawa A, Gosling J, Boring L, Charo IF, Simpson KJ, Lukacs NW, Kunkel SL.

Department of Pathology, University of Michigan Medical School, Ann Arbor, Michigan 48109-0602, USA. hogaboam@path.med.umich.edu

Monocyte chemoattractant protein-1 is one of the major C-C chemokines that has been implicated in liver injury. The C-C chemokine receptor, CCR2, has been identified as the primary receptor that mediates monocyte chemoattractant protein-1 (MCP-1) responses in the mouse. Accordingly, the present study addressed the role of CCR2 in mice acutely challenged with acetaminophen (APAP). Mice genetically deficient in CCR2 (CCR2(-/-)) and their wild-type counterparts (CCR2(+/+)) were fasted for 10 hours before receiving an intraperitoneal injection of APAP (300 mg/kg). Liver and serum samples were removed from both groups of mice before and at 24 and 48 hours post APAP. Significantly elevated levels of MCP-1 were detected in liver samples from CCR2(+/+) and CCR2(-/-) mice at 24 hours post-APAP. Although CCR2(+/+) mice exhibited no liver injury at any time after receiving APAP, CCR2(-/-) mice exhibited marked evidence of necrotic and TUNELpositive cells in the liver, particularly at 24 hours post-APAP. Enzyme-linked immunosorbent assay analysis of liver homogenates from both groups of mice at the 24 hours time point revealed that liver tissue from CCR2(-/-) mice contained significantly greater amounts of immunoreactive IFN-gamma and TNF-alpha. The in vivo immunoneutralization of IFN-gamma or TNF-alpha significantly attenuated APAP-induced liver injury in CCR2(-/-) mice and increased hepatic IL-13 levels. Taken together, these findings demonstrate that CCR2 expression in the liver provides a hepatoprotective effect through its regulation of cytokine generation during APAP challenge.

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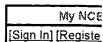
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1: Mol Immunol. 1999 Dec;36(18):1249-54.

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FULL-TEXYARTIGE

Inhibition of M-tropic HIV-1 infection by the fd phage-gene 3 protein with MIP-1alpha-binding activity.

Meta A, Torigoe N, Ito Y, Arakaki R, Nakashima H, Sugimura K.

Department of Bioengineering, Faculty of Engineering, Kagoshima University, 1-21-40 Korimoto, Kagoshima, Japan.

CCR5 is a chemokine receptor with seven transmembrane-domains. It is expressed on T cells and macrophages and functions as the principal coreceptor for macrophage (M)-tropic strains of HIV-1. The anti-CCR5 monoclonal antibody (mAb) 2D7 inhibits the binding and chemotaxis of the three natural beta-chemokine ligands of CCR5, macrophage inflammatory protein (MIP)-lalpha, MIP-lbeta, and RANTES, to CCR5(+) cells. The mAb also efficiently blocks the infectivity of several M-tropic and dual-tropic HIV-1 strains in vitro. In this study, we attempted to determine the peptide motif recognized with the 2D7 mAb. We isolated phage clones by panning a phage display library using 2D7 and identified three peptide motifs. One of these phage clones (M23) showed a marked inhibitory activity on HIV-1 infection. The unique sequence of 15 amino acids with an internal disulfide bond was inserted in the g3p of the M23 phage clone (M23-g3p). The M23-g3p was purified by fast-performance liquid chromatography (FPLC). We show here that (1) M23-g3p was specifically recognized with anti-CCR5 mAb; (2) M23g3p showed inhibitory activity on the infectivity of M-tropic but not T-tropic HIV-1 strains; (3) M23-g3p bound to MIP-1alpha, MIP-1beta, and RANTES but not MCP-1. These results suggested that the M23-g3p might mimic the CCR5-binding domain shared by beta-chemokines, MIP-1alpha, MIP-1beta, and RANTES as well as the HIV-1 infection.

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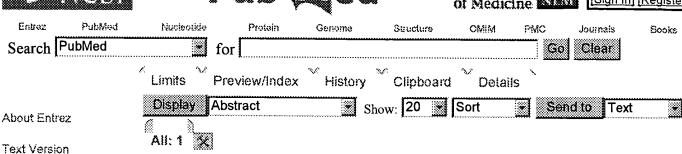
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Intracellular IL-1 receptor antagonist is elevated in human dermal fibroblasts that overexpress intracellular precursor IL-1 alpha.

Higgins GC, Wu Y, Postlethwaite AE.

Department of Pediatrics, Division of Clinical Immunology, Crippled Children's Foundation Research Center at LeBonheur Children's Medical Center, Memphis, TN 38103, USA. higginsg@pediatrics.ohiostate.edu

Cultured dermal fibroblasts from systemic sclerosis patients express higher levels of intracellular IL-1 alpha than fibroblasts from healthy controls. In this study, we found that systemic sclerosis dermal fibroblasts also express higher levels of the intracellular isoform of IL-1 receptor antagonist (icIL-1Ra) than normal fibroblasts after stimulation with IL-1 beta or TNF-alpha. A possible relationship between elevated precursor IL-1 alpha (preIL-1 alpha) and elevated ic L-1Ra was investigated by transducing normal dermal fibroblasts to overexpress preIL-1 alpha, preIL-1 beta, or icIL-1Ra. Fibroblasts that overexpressed icIL-1Ra did not have elevated levels of IL-1 alpha. On the other hand, fibroblasts that overexpressed preIL-1 alpha had at least 4-fold higher basal levels of icIL-1Ra than control fibroblasts and 4-fold higher levels of icIL-1Ra after induction with IL-1 beta or TNF-alpha. Fibroblasts overexpressing preIL-1 beta did not exhibit elevated icIL-1Ra. The differences in icIL-1Ra protein levels were reflected in differences in mRNA. In contrast, IL-1-stimulated levels of MCP-1 and IL-6 were not different in control and preIL-1 alpha-transduced fibroblasts. Addition of neutralizing anti-IL-1 alpha Abs to fibroblast cultures did not diminish basal or stimulated levels of icIL-1Ra in the preIL-1 alpha-transduced cells, supporting an intracellular site of action of preIL-1 alpha. This is the first report of an association between intracellular levels of these IL-1 family members. We hypothesize that intracellular preIL-1 alpha participates in the regulation of icIL-1Ra.

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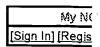
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Propagermanium reduces atherosclerosis in apolipoprotein E knockout mice via inhibition of macrophage infiltration.

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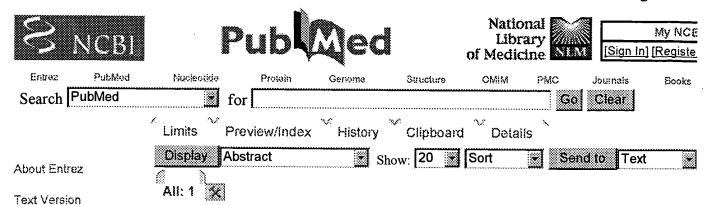
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Amlodipine, a new 1,4-dihydropyridine calcium antagonist with a particularly strong antihypertensive profile.

Fleckenstein A, Frey M, Zorn J, Fleckenstein-Grun G.

Physiological Institute, University of Freiburg, Federal Republic of Germany.

The effects of a new 1,4-dihydropyridine derivative amlodipine have been compared with results from our previous work. Application of amlodipine at a concentration of 1.6 X 10(-6) M to isolated guinea-pig papillary muscle for 120 minutes produced a 50% reduction in tension development compared with a concentration of 3.7 X 10(-7) M nifedipine needed to produce the same result under identical conditions. This suggests that amlodipine has even weaker negative inotropic effects than nifedipine. In isolated porcine coronary strips, the K+-induced contractions were approximately 10,000 times more sensitive to the relaxing effects of nisoldipine, nitrendipine and nicardipine than to those of papaverine, whereas nifedipine and amlodipine were 3,000 times more potent than papaverine. However, in comparison with these in vitro actions, the efficacy of amlodipine appears to be greater in vivo: Simultaneous subcutaneous injection of nifedipine (20 mg/kg) and of equimolar doses of nisoldipine and felodipine attenuated the myocardial calcium uptake by rat hearts in situ (stimulated with a single subcutaneous dose of 30 mg/kg isoproterenol) with the same efficacy, whereas the actions of nitrendipine and nimodipine were considerably weaker. In contrast, amlodipine antagonized isoproterenol-stimulated myocardial calcium accumulation more effectively. Furthermore, amlodipine exhibited a high antihypertensive potency combined with rapid onset and long duration of action: Amlodipine (10 mg/kg orally [p.o.]) reduced the blood pressure of spontaneously hypertensive rats almost to the same extent as nifedipine, nitrendipine, verapamil and felodipine administered at the much higher doses of 100 mg/kg p.o. Amlodipine (20 mg/kg/day p.o.) maintained normal blood pressure during the whole life span of Dahl-S rats (5 months), but this dose is considerably lower than that reported for other 1,4-dihydropyridines. The survival of NaCl-loaded Dahl-S rats increased from 20 to 100% after administration of amlodipine (20 mg/kg/day p.o.) over 10 weeks: The effective dose of other calcium antagonists is approximately 5 times higher, but well tolerated as, e.g., demonstrated in long-term studies on Dahl-S rats with nitrendipine over 12 months. Increases in systemic arteriolar tone can be visualized in the ocular fundus of spontaneously hypertensive rats. After amlodipine (10 mg/kg p.o.) arteriolar spasm declines. Prophylaxis with 2

doses of 20 mg/kg amlodipine daily in NaCl-loaded Dahl-S rats abolished the macroscopic and histologic changes that are normally seen in branches of the mesenteric artery. With use of electron microscopy, calcium accumulation in the lamina elastica interna was demonstrated by the potassium-pyr-oantimonate technique.(ABSTRACT TRUNCATED AT 400 WORDS)

PMID: 2530884 [PubMed - indexed for MEDLINE]

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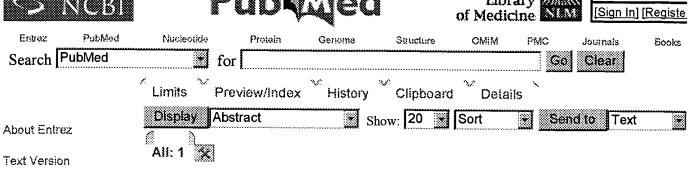
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Progress in cardioprotection: the role of calcium antagonists.

Kloner RA, Przyklenk K.

Heart Institute, Hospital of the Good Samaritan, Los Angeles, California 90017.

Calcium antagonists are now widely used for the treatment of clinical hypertension and angina pectoris. They are efficacious for the treatment of vasospastic, fixed atherosclerotic and mixed angina; they reduce the incidence of silent ischemia; and they have been shown to reduce postmyocardial infarct angina. Experimental data suggest that they may have certain cardioprotective properties in cases of acute myocardial ischemia and infarction, stunned myocardium, diastolic dysfunction, left ventricular hypertrophy and atherosclerosis. Moreover, they have been shown to improve exercise performance, as well as the diastolic abnormalities in patients with hypertrophic cardiomyopathy. In animals, they may delay or reduce the extent of myocardial necrosis after coronary occlusion or coronary occlusion followed by reperfusion, and in low doses that do not alter the hemodynamic profile, they have been shown to enhance the return of ventricular function in animals with stunned myocardium. However, the early first-generation calcium antagonists (nifedipine, verapamil, diltiazem) have not been shown to reduce myocardial infarct size or to enhance survival in patients with acute myocardial infarction. There now are clinical studies that suggest that, unlike beta blockers or nitrates, nifedipine may slow the development of atherosclerotic progression in humans over a 2-year period, and it seems likely that in the 1990s there will be further expansion of the use of calcium antagonists for not only angina and hypertension but also for aspects of cardioprotection. That calcium antagonists may delay, prevent or possibly regress atherosclerotic lesions is an exciting possibility.

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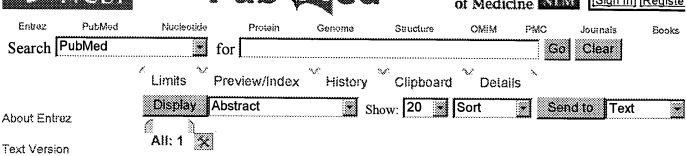
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1: Postgrad Med J. 1991;67 Suppl 5:S41-3.

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Vascular and myocardial effects of amlodipine: an overview.

Nayler WG, Gu XH.

Department of Medicine, University of Melbourne, Austin Hospital, Heidelberg, Victoria, Australia.

Amlodipine is a long-acting dihydropyridine calcium antagonist with vascular selectivity. Although structurally related to nifedipine, amlodipine differs in several important respects, including its slow rate of onset and slow recovery. These effects probably reflect the relatively slow rate of association and dissociation of amlodipine with its binding site. The interaction of amlodipine with the calcium antagonist binding site associated with the slow Ca2+ channels differs from that of other dihydropyridines in that it involves the binding domains for the phenylalkylamine- and benzothiazepine-based antagonists, as well as for the dihydropyridines. The prolonged duration of action of amlodipine makes it suitable for use in conditions where calcium channel blockade is required on a 24-h basis. To determine whether amlodipine has a vascular protective effect, amlodipine was given orally to either cholesterol-fed rabbits or stroke-prone hypertensive rats. In the cholesterol-fed rabbits amlodipine (1 or 5 mg/kg/day) produced a significant, dose-dependent reduction in the incidence of atheromatous lesions in the thoracic aorta over an 8-week period. In stroke-prone rats the administration of amlodipine at a dose of 5 mg/kg/day reduced the incidence of mortality over a 30-week treatment period. In spontaneously hypertensive rats amlodipine (5 mg/kg/day) caused a fall in systolic blood pressure, accompanied by a significant (P less than 0.01) reduction in cardiac hypertrophy. When administered intravenously (0.25 mg/kg) 5 h before hearts were excised and made globally ischaemic for short periods (the 'stunned' heart) amlodipine pretreatment improved functional recovery associated with reperfusion.

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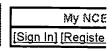
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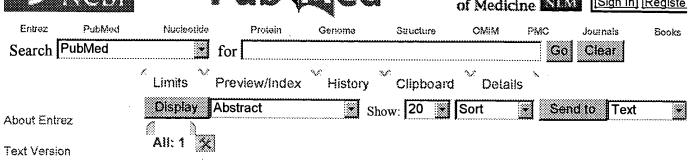
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Protective effects of various calcium antagonists against experimental arteriosclerosis.

Fleckenstein-Grun G, Frey M, Thimm F, Fleckenstein A.

Study Group for Calcium Antagonism, University of Freiburg, Germany.

Arterial walls altered by sclerotic processes accumulate lipids (particularly cholesterol) and calcium. Whereas the accumulation of lipids has long been incriminated as the major pathogenic factor involved in arteriosclerosis. concomitant arterial calcium overload has been considered of secondary importance. Using various animal models and specific calcium antagonists as experimental tools, we have shown the crucial role of excessive calcium uptake into arterial walls in the pathogenesis of arteriosclerotic lesions. Anticalcinotic vasoprotection with calcium antagonists has been demonstrated using light and electron microscopy, radiocalcium uptake experiments and calcium analyses with atomic absorption spectroscopy. The new 1.4dihydropyridine calcium antagonist amlodipine has been shown to inhibit calcium accumulation in the internal elastic membrane of abdominal arteries of NaCl-loaded salt-sensitive Dahl-S rats, and consequently also exerts protective effects against arteriosclerotic lesions, shown particularly in the distal mesenteric artery branches. Formation of human coronary plaques is marked by a substantial local uptake of calcium, whereas there is a large overlap in the mural cholesterol content of healthy coronary arteries and plaques. Experimental findings in animals and with human tissue indicate that calcium antagonists such as amlodipine may provide a new approach to the prophylaxis of coronary artery lesions.

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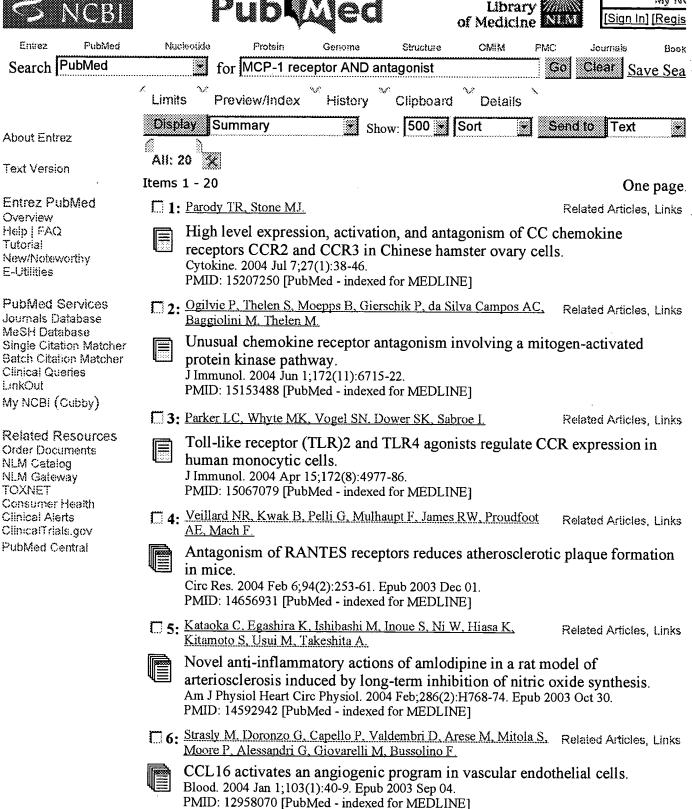
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CCR2: characterization of the antagonist binding site from a combined receptor modeling/mutagenesis approach. J Med Chem. 2003 Sep 11;46(19):4070-86.

PMID: 12954060 [PubMed - indexed for MEDLINE]

Shillito H, Willetts J, Witherington J.

7: Berkhout TA, Blaney FE, Bridges AM, Cooper DG, Forbes IT,

Gribble AD, Groot PH, Hardy A, Ife RJ, Kaur R, Moores KE,

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8. Jin H, Vicario PP, Zweerink H, Goyal S, Hanlon WA, Dorn CP, Related Articles, Links Mills SG, DeMartino JA, Cascieri MA, Struthers M. Expression and characterization of the chemokine receptor CCR2B from rhesus monkey. Biochem Pharmacol. 2003 Jul 15;66(2):321-30. PMID: 12826275 [PubMed - indexed for MEDLINE] 9: Ogilvie P. Paoletti S, Clark-Lewis I, Uguccioni M. Related Articles, Links Eotaxin-3 is a natural antagonist for CCR2 and exerts a repulsive effect on human monocytes. Blood. 2003 Aug 1;102(3):789-94. Epub 2003 Apr 10. PMID: 12689946 [PubMed - indexed for MEDLINE] 10: Janssen U, Sowa E, Marchand P, Floege J, Phillips AO, Radeke Related Articles, Links Differential expression of MCP-1 and its receptor CCR2 in glucose primed human mesangial cells. Nephron. 2002 Dec;92(4):797-806. PMID: 12399623 [PubMed - indexed for MEDLINE] 11: Aiello RJ, Bourassa PA, Lindsey S, Weng W, Freeman A, Showell Related Articles, Links Leukotriene B4 receptor antagonism reduces monocytic foam cells in mice. Arterioscler Thromb Vasc Biol. 2002 Mar 1;22(3):443-9. PMID: 11884288 [PubMed - indexed for MEDLINE] 12: Rhodes A, Smithers N, Chapman T, Parsons S, Rees S. Related Articles, Links The generation and characterisation of antagonist RNA aptamers to MCP-1. FEBS Lett. 2001 Oct 5;506(2):85-90. PMID: 11591377 [PubMed - indexed for MEDLINE] 13: Ogilvie P, Bardi G, Clark-Lewis I, Baggiolini M, Uguccioni M. Related Articles, Links Eotaxin is a natural antagonist for CCR2 and an agonist for CCR5. Blood. 2001 Apr 1;97(7):1920-4. PMID: 11264152 [PubMed - indexed for MEDLINE] 114: Forbes IT, Cooper DG, Dodds EK, Hickey DM, Ife RJ, Meeson M, Related Articles, Links Stockley M. Berkhout TA. Gohil J. Groot PH, Moores K. CCR2B receptor antagonists: conversion of a weak HTS hit to a potent lead compound. Bioorg Med Chem Lett. 2000 Aug 21;10(16):1803-6. PMID: 10969972 [PubMed - indexed for MEDLINE] 15: Shiraishi M. Aramaki Y. Seto M. Imoto H. Nishikawa Y. Kanzaki Related Articles, Links N, Okamoto M, Sawada H, Nishimura O, Baba M, Fujino M. Discovery of novel, potent, and selective small-molecule CCR5 antagonists as anti-HIV-1 agents: synthesis and biological evaluation of anilide derivatives with a quaternary ammonium moiety. J Med Chem. 2000 May 18;43(10):2049-63. PMID: 10821717 [PubMed - indexed for MEDLINE] 16: Bird JE, Giancarli MR, Kurihara T, Kowala MC, Valentine MT, Related Articles, Links Gitlitz PH, Pandya DG, French MH, Durham SK. Increased severity of glomerulonephritis in C-C chemokine receptor 2 knockout mice. Kidney Int. 2000 Jan;57(1):129-36. PMID: 10620194 [PubMed - indexed for MEDLINE] 17: Weber KS, Nelson PJ, Grone HJ, Weber C. Related Articles, Links



Expression of CCR2 by endothelial cells: implications for MCP-1 mediated wound injury repair and In vivo inflammatory activation of endothelium.

Arterioscler Thromb Vasc Biol. 1999 Sep;19(9):2085-93. PMID: 10479649 [PubMed - indexed for MEDLINE]

18: Penton-Rol G, Cota M, Polentarutti N, Luini W, Bernasconi S, Borsatti A, Sica A, LaRosa GJ, Sozzani S, Poli G, Mantovani A.

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Up-regulation of CCR2 chemokine receptor expression and increased susceptibility to the multitropic HIV strain 89.6 in monocytes exposed to glucocorticoid hormones.

J Immunol. 1999 Sep 15;163(6):3524-9.

PMID: 10477627 [PubMed - indexed for MEDLINE]

19: Weber C, Draude G, Weber KS, Wubert J, Lorenz RL, Weber PC. Related Articles, Links



Downregulation by tumor necrosis factor-alpha of monocyte CCR2 expression and monocyte chemotactic protein-1-induced transendothelial migration is antagonized by oxidized low-density lipoprotein: a potential mechanism of monocyte retention in atherosclerotic lesions.

Atherosclerosis. 1999 Jul;145(1):115-23.

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20: Frade JM, Mellado M, del Real G, Gutierrez-Ramos JC, Lind P. Related Martinez-A C.

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Characterization of the CCR2 chemokine receptor: functional CCR2 receptor expression in B cells.

Frade JM, Mellado M, del Real G, Gutierrez-Ramos JC, Lind P, Martinez-A C.

Department of Immunology and Oncology, Centro Nacional de Biotecnologia, Consejo Superior de Investigaciones Cientificas, Campus Cantoblanco, Universidad Autonoma, Madrid, Spain.

We have derived anti-human CCR2-specific mAbs by immunization with synthetic peptides corresponding to CCR2 sequences presumably involved in the interaction with its ligand(s). The characterization of these mAbs includes the ability to recognize the CCR2 receptor specifically, as well as the function based on their ability to promote Ca2+ influx or to block MCP-1-induced Ca2+ influx and chemotaxis. One mAb (MCP-1 R02) that is directed to the NH2 terminal domain of the CCR2 receptor has MCP-1 agonist activity, and two that recognize the third extracellular domain (MCP-1R04 and MCP-1 R05) have MCP-1 antagonist activity. We analyzed the presence of CCR2 in several PBL and tonsil-derived leukocyte populations and found expression of this receptor in monocytes, activated T cells, and, surprisingly, in B cells. CCR2 receptor expression in B cells was further corroborated in Southern blot using CCR2-specific probes. Moreover, both MCP-1 and the agonist mAb trigger specific B cell migration via a PTX-sensitive mechanism, indicating the presence of a functional CCR2 receptor in these cells.

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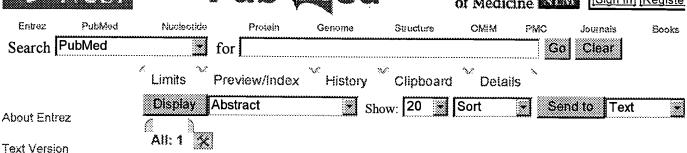
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Eotaxin is a natural antagonist for CCR2 and an agonist for CCR5.

Ogilvie P, Bardi G, Clark-Lewis I, Baggiolini M, Uguccioni M.

Institute for Research in Biomedicine, Bellinzona, Switzerland.

Eotaxin is a potent inducer of eosinophil chemotaxis and was considered as a selective ligand of the CC chemokine receptor 3 (CCR3), which is expressed on eosinophils, basophils, and Th2 lymphocytes. This study shows that eotaxin also interacts with CCR2 and CCR5 and can, thus, affect the responses of monocytes, which express both receptors. In human monocytes pretreatment with eotaxin decreased responsiveness to MCP-1, a selective ligand for CCR2, as well as to RANTES and MIP-1 beta, which bind to CCR5. Similar effects were obtained with transfected cells expressing CCR2 or CCR5, but here a difference became apparent: Eotaxin triggered CCR5 at a concentration of 100 nM but not CCR2 even at 1 microM, suggesting an antagonistic effect on this receptor. In agreement with this observation, eotaxin induced internalization of CCR5 but not of CCR2 in human monocytes and transfected cells. Binding studies showed that eotaxin displaces (125) I-MCP-1 from monocytes in a concentration-dependent manner, and functional experiments showed that eotaxin inhibits MCP-1induced chemotaxis and enzyme release. The results demonstrate that eotaxin is a CCR5 agonist and a CCR2 antagonist. The present findings suggest a role of eotaxin in the fine-tuning of cellular responses occurring at sites of allergic inflammation, in which both MCP-1 and eotaxin are produced. (Blood. 2001;97:1920-1924)

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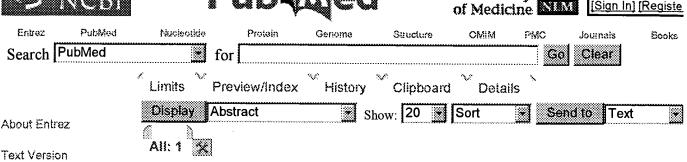
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Eotaxin is a natural antagonist for CCR2 and an agonist for CCR5.

Ogilvie P, Bardi G, Clark-Lewis I, Baggiolini M, Uguccioni M.

Institute for Research in Biomedicine, Bellinzona, Switzerland.

Eotaxin is a potent inducer of eosinophil chemotaxis and was considered as a selective ligand of the CC chemokine receptor 3 (CCR3), which is expressed on eosinophils, basophils, and Th2 lymphocytes. This study shows that eotaxin also interacts with CCR2 and CCR5 and can, thus, affect the responses of monocytes, which express both receptors. In human monocytes pretreatment with eotaxin decreased responsiveness to MCP-1, a selective ligand for CCR2, as well as to RANTES and MIP-1 beta, which bind to CCR5. Similar effects were obtained with transfected cells expressing CCR2 or CCR5, but here a difference became apparent. Eotaxin triggered CCR5 at a concentration of 100 nM but not CCR2 even at 1 microM, suggesting an antagonistic effect on this receptor. In agreement with this observation, eotaxin induced internalization of CCR5 but not of CCR2 in human monocytes and transfected cells. Binding studies showed that eotaxin displaces (125) I-MCP-1 from monocytes in a concentration-dependent manner, and functional experiments showed that eotaxin inhibits MCP-1induced chemotaxis and enzyme release. The results demonstrate that eotaxin is a CCR5 agonist and a CCR2 antagonist. The present findings suggest a role of eotaxin in the fine-tuning of cellular responses occurring at sites of allergic inflammation, in which both MCP-1 and eotaxin are produced. (Blood. 2001;97:1920-1924)

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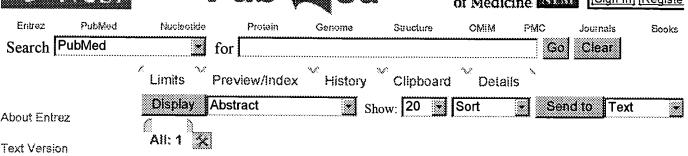
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The generation and characterisation of antagonist RNA aptamers to MCP-1.

Rhodes A, Smithers N, Chapman T, Parsons S, Rees S.

Molecular Discovery Department, Glaxo Wellcome Research and Development, Stevenage, Herts SG1 2NY, UK. adr7003@gsk.com

Monocyte chemoattractant protein-1 (MCP-1) has been implicated as a powerful pro-inflammatory mediator and may represent a potentially important, therapeutic opportunity for treatment of inflammatory disease and atherosclerosis. To further investigate the role of MCP-1 in inflammatory disorders we have isolated a series of RNA aptamers that bind specifically to mouse MCP-1. The highest affinity aptamers, designated ADR7 and ADR22, have been functionally characterised in vitro and in cell based assays. ADR7 and ADR22 have an affinity of 180 pM and 370 pM respectively for mouse MCP-1, they can antagonise MCP-1 binding to heparin and specifically antagonise MCP-1 induced chemotaxis in a cell based assay. An interesting feature of ADR22 but not ADR7 is that it is capable of antagonising the function of human MCP-1, demonstrating the high level of specificity of these aptamers and that the aptamers recognise MCP-1 in different ways. The aptamers may be used as a tool to further investigate the role of MCP-1 in inflammatory disorders and may also have a role as a therapeutic agent.

PMID: 11591377 [PubMed - indexed for MEDLINE]

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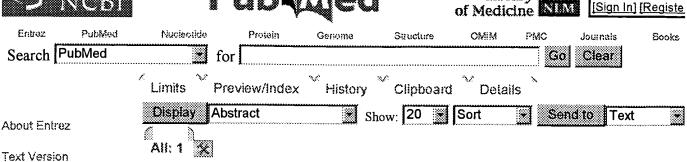
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Eotaxin-3 is a natural antagonist for CCR2 and exerts a repulsive effect on human monocytes.

Ogilvie P, Paoletti S, Clark-Lewis I, Uguccioni M.

Institute for Research in Biomedicine, Via Vela 6, 6500 Bellinzona, Switzerland.

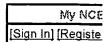
Eotaxin-3 (CCL26) belongs to the group of CC chemokines that attract eosinophils, basophils, and Th2 lymphocytes. Like eotaxin (CCL11) and eotaxin-2 (CCL24), eotaxin-3 mediates its activity through CCR3. Here we show that eotaxin-3 also binds to CCR2 on monocytes and CCR2-transfected cells. In contrast to monocyte chemotactic protein 1 (MCP-1; CCL2), eotaxin-3 does not trigger intracellular calcium mobilization, enzyme release, or phosphorylation of the mitogen-activated protein (MAP) kinase ERK and induces a weak chemotaxis in monocytes. Instead, eotaxin-3 inhibits MCP-1mediated responses, thus acting as a natural antagonist for CCR2. This study also demonstrates that eotaxin-3 promotes active movement of monocytes away from a gradient of eotaxin-3 in vitro. This repellent effect is amplified when an additional gradient of MCP-1 is applied, demonstrating that the 2 mechanisms are synergistic. Eotaxin-3 effects on monocytes are largely abolished when cells are pretreated with MCP-1 or CCR2 antagonists. Like MCP-1-mediated migration, repulsion is sensitive to Bordetella pertussis toxin, indicating the involvement of Gi protein-coupled receptors. However, using transfected cells expressing CCR2 we could not detect F-actin formation or an active movement away induced by eotaxin-3, suggesting that either expression of a single receptor type is not sufficient to mediate cell repulsion or that the used transfected cell lines lack additional interaction molecules that are required for reverse migration. Eotaxin-3 was expressed by vascular endothelial cells and was essential for endothelial transmigration of eosinophils. Our data provide a mechanism by which 2 chemokine gradients that are oriented in opposite directions could cooperate in efficiently driving out monocytes from blood vessels into tissue.

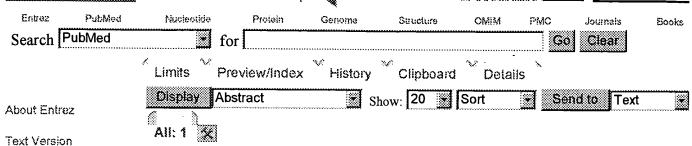
PMID: 12689946 [PubMed - indexed for MEDLINE]











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CCR2: characterization of the antagonist binding site from a combined receptor modeling/mutagenesis approach.

Berkhout TA, Blaney FE, Bridges AM, Cooper DG, Forbes IT, Gribble AD, Groot PH, Hardy A, Ife RJ, Kaur R, Moores KE, Shillito H, Willetts J, Witherington J.

Department of Vascular Biology, GlaxoSmithKline, New Frontiers Science Park, Third Avenue, Harlow, Essex, UK CM19 5AD.

We describe here a classical molecular modeling exercise that was carried out to provide a basis for the design of novel antagonist ligands of the CCR2 receptor. Using a theoretical model of the CCR2 receptor, docking studies were carried out to define plausible binding modes for the various known antagonist ligands, including our own series of indole piperidine compounds. On the basis of these results, a number of site-directed mutations (SDM) were designed that were intended to verify the proposed docking models. From these it was clear that further refinements would be necessary in the model. This was aided by the publication of a crystal structure of bovine rhodopsin, and a new receptor model was built by homology to this structure. This latest model enabled us to define ligand-docking hypotheses that were in complete agreement with the results of the SDM experiments.

PMID: 12954060 [PubMed - indexed for MEDLINE]

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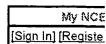
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Novel anti-inflammatory actions of amlodipine in a rat model of arteriosclerosis induced by long-term inhibition of nitric oxide synthesis.

Kataoka C, Egashira K, Ishibashi M, Inoue S, Ni W, Hiasa K, Kitamoto S, Usui M, Takeshita A.

Department of Cardiovascular Medicine, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan.

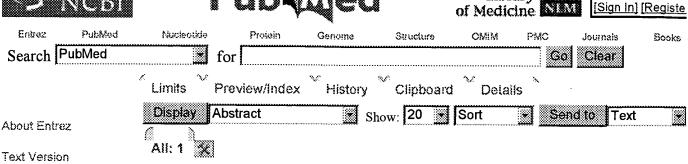
Amlodipine (a new class of calcium channel antagonist) has been shown to limit the progression of arteriosclerosis and decrease the incidence of cardiovascular events. The mechanisms underlying the beneficial effects of amlodipine, however, remain unclear. Therefore, we hypothesized that amlodipine attenuates the development of arteriosclerosis through the inhibition of inflammation in vivo. Long-term inhibition of nitric oxide (NO) by administration of a NO synthase inhibitor, N(omega)-nitro-L-arginine methyl ester (L-NAME), to rats induces coronary vascular inflammation [monocyte infiltration, monocyte chemoattractant protein-1 (MCP-1) expression, increased activity of angiotensin-converting enzyme (ACE)], and arteriosclerosis. Here, we used the rat model to investigate the antiinflammatory effects of amlodipine in vivo. Treatment with amlodipine markedly inhibited the L-NAME-induced increase in vascular inflammation, oxidative stress, and local ACE and Rho activity and prevented arteriosclerosis. Interestingly, amlodipine prevented the L-NAME-induced increase in MCP-1 receptor CCR2 expression in circulating monocytes. Amlodipine markedly attenuated the high mortality rate at 8 wk of treatment. These data suggest that amlodipine attenuated arteriosclerosis through inhibiting inflammatory disorders in the rat model of long-term inhibition of NO synthesis. The anti-inflammatory effects of amlodipine seem to be mediated not only by the inhibition of local factors such as MCP-1 but also by the decrease in CCR2 in circulating monocytes. Inhibition of the MCP-1 to CCR2 pathway may represent novel anti-inflammatory actions of amlodipine beyond blood pressure lowering.

PMID: 14592942 [PubMed - indexed for MEDLINE]









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Novel anti-inflammatory actions of amlodipine in a rat model of arteriosclerosis induced by long-term inhibition of nitric oxide synthesis.

Kataoka C, Egashira K, Ishibashi M, Inoue S, Ni W, Hiasa K, Kitamoto S, Usui M, Takeshita A.

Department of Cardiovascular Medicine, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan.

Amlodipine (a new class of calcium channel antagonist) has been shown to limit the progression of arteriosclerosis and decrease the incidence of cardiovascular events. The mechanisms underlying the beneficial effects of amlodipine, however, remain unclear. Therefore, we hypothesized that amlodipine attenuates the development of arteriosclerosis through the inhibition of inflammation in vivo. Long-term inhibition of nitric oxide (NO) by administration of a NO synthase inhibitor, N(omega)-nitro-L-arginine methyl ester (L-NAME), to rats induces coronary vascular inflammation [monocyte infiltration, monocyte chemoattractant protein-1 (MCP-1) expression, increased activity of angiotensin-converting enzyme (ACE)], and arteriosclerosis. Here, we used the rat model to investigate the antiinflammatory effects of amlodipine in vivo. Treatment with amlodipine markedly inhibited the L-NAME-induced increase in vascular inflammation, oxidative stress, and local ACE and Rho activity and prevented arteriosclerosis. Interestingly, amlodipine prevented the L-NAME-induced increase in MCP-1 receptor CCR2 expression in circulating monocytes. Amlodipine markedly attenuated the high mortality rate at 8 wk of treatment. These data suggest that amlodipine attenuated arteriosclerosis through inhibiting inflammatory disorders in the rat model of long-term inhibition of NO synthesis. The anti-inflammatory effects of amlodipine seem to be mediated not only by the inhibition of local factors such as MCP-1 but also by the decrease in CCR2 in circulating monocytes. Inhibition of the MCP-1 to CCR2 pathway may represent novel anti-inflammatory actions of amlodipine beyond blood pressure lowering.

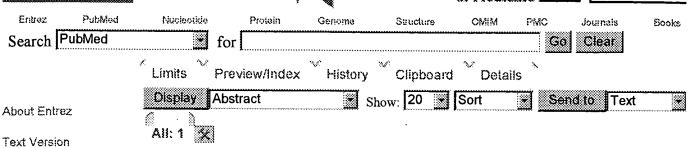
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High level expression, activation, and antagonism of CC chemokine receptors CCR2 and CCR3 in Chinese hamster ovary cells.

Parody TR, Stone MJ.

Department of Chemistry, Indiana University, Bloomington, IN 47405-0001, USA.

The specificity of leukocyte trafficking in inflammation is controlled by the interactions of chemokines with chemokine receptors. Reliable structurefunction studies of chemokine-receptor interactions would benefit from cell lines that express consistent high levels of chemokine receptors. We describe herein two new Chinese hamster ovary (CHO) cell lines in which the genes for chemokine receptors CCR2 and CCR3 have been incorporated into identical positions in the host genome. CCR2 is the primary receptor for the chemokine monocyte chemoattractant protein-1 (MCP-1) whereas CCR3 is the primary receptor for the chemokines eotaxin-1, eotaxin-2 and eotaxin-3. Both receptors are expressed at >5,000,000 copies per cell, substantially higher levels than in previous cell lines, and both are competent for binding and activation by the cognate chemokines for these receptors. Using these cell lines we confirm that eotaxin-1 and eotaxin-3 can act as an agonist and an antagonist, respectively, of CCR2. In addition, we show that eotaxin-2 is an antagonist of CCR2 and MCP-1 is an agonist of CCR3. Comparison of the chemokine sequences reveals several positions that are identical in MCP-1 and eotaxin-1 but different in eotaxin-2 and eotaxin-3, suggesting that these amino acids play a role in CCR2 activation.

PMID: 15207250 [PubMed - indexed for MEDLINE]

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> 7: Petkovic V, Moghini C, Paoletti S, Uguccioni M, Gerber B. Eotaxin-3/CCL26 is a natural antagonist for CC chemokine receptors 1 and

PMID: 15067079 [PubMed - indexed for MEDLINE]

5. A human chemokine with a regulatory role. J Biol Chem. 2004 May 28;279(22):23357-63. Epub 2004 Mar 23.

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deficient mice.

Bidouard JP, Janiak P, Schaeffer P, Herbert JM.

Angiotensin AT1 receptor antagonist irbesartan decreases lesion size, chemokine expression, and macrophage accumulation in apolipoprotein E- J Cardiovasc Pharmacol. 2001 Sep;38(3):395-405. PMID: 11486244 [PubMed - indexed for MEDLINE]

7: Owen C.

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Chemokine receptors in airway disease: which receptors to target? Pulm Pharmacol Ther. 2001;14(3):193-202. Review.

PMID: 11448146 [PubMed - indexed for MEDLINE]

18: Ogilvie P. Bardi G. Clark-Lewis I, Baggiolini M. Uguccioni M.

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Eotaxin is a natural antagonist for CCR2 and an agonist for CCR5.

Blood. 2001 Apr 1;97(7):1920-4.

PMID: 11264152 [PubMed - indexed for MEDLINE]

13: Bird JE, Giancarli MR, Kurihara T, Kowala MC, Valentine MT, Gitlitz PH, Pandya DG, French MH, Durham SK.

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Increased severity of glomerulonephritis in C-C chemokine receptor 2 knockout mice.

Kidney Int. 2000 Jan;57(1):129-36.

PMID: 10620194 [PubMed - indexed for MEDLINE]

20: Proudfoot AE, Buser R, Borlat F, Alouani S, Soler D, Offord RE. Schroder JM, Power CA, Wells TN



Amino-terminally modified RANTES analogues demonstrate differential effects on RANTES receptors.

J Biol Chem. 1999 Nov 5;274(45):32478-85.

PMID: 10542293 [PubMed - indexed for MEDLINE]

21: Weber KS, Nelson PJ, Grone HJ, Weber C.

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Expression of CCR2 by endothelial cells: implications for MCP-1 mediated wound injury repair and In vivo inflammatory activation of endothelium.

Arterioscler Thromb Vasc Biol. 1999 Sep;19(9):2085-93. PMID: 10479649 [PubMed - indexed for MEDLINE]

22: Penton-Rol G, Cota M, Polentarutti N, Luini W, Bernasconi S, Borsatti A, Sica A, LaRosa GJ, Sozzani S, Poli G, Mantovani A

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Up-regulation of CCR2 chemokine receptor expression and increased susceptibility to the multitropic HIV strain 89.6 in monocytes exposed to glucocorticoid hormones.

J Immunol. 1999 Sep 15;163(6):3524-9.

PMID: 10477627 [PubMed - indexed for MEDLINE]

23: Weber C, Draude G, Weber KS, Wubert J, Lorenz RL, Weber PC. Related Articles, Links



Downregulation by tumor necrosis factor-alpha of monocyte CCR2 expression and monocyte chemotactic protein-1-induced transendothelial migration is antagonized by oxidized low-density lipoprotein: a potential mechanism of monocyte retention in atherosclerotic lesions.

Atherosclerosis. 1999 Jul;145(1):115-23.

PMID: 10428302 [PubMed - indexed for MEDLINE]

1 24: Hadida F, Vieillard V, Autran B, Clark-Lewis I, Baggiolini M. Related Articles, Links Debre P.



HIV-specific T cell cytotoxicity mediated by RANTES via the chemokine receptor CCR3.

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J Exp Med. 1998 Aug 3;188(3):609-14.

PMID: 9687538 [PubMed - indexed for MEDLINE]

T 25: Frade JM, Mellado M, del Real G, Gutierrez-Ramos JC, Lind P. Related Articles, Links Martinez-A C

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Characterization of the CCR2 chemokine receptor: functional CCR2 receptor expression in B cells.

J Immunol. 1997 Dec 1;159(11):5576-84.

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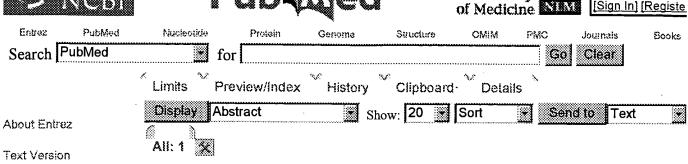
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Amino-terminally modified RANTES analogues demonstrate differential effects on RANTES receptors.

Proudfoot AE, Buser R, Borlat F, Alouani S, Soler D, Offord RE, Schroder JM, Power CA, Wells TN.

Serono Pharmaceutical Research Institute, 14 Chemin des Aulx, 1228 Planles-Ouates, Geneva, Switzerland. amanda.proudfoot@serono.com

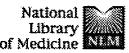
Modification of the amino terminus of regulated on activated normal T-cell expressed (RANTES) has been shown to have a significant effect on biological activity and produces proteins with antagonist properties. Two amino-terminally modified RANTES proteins, Met-RANTES and aminooxypentane-RANTES (AOP-RANTES), exhibit differential inhibitory properties on both monocyte and eosinophil chemotaxis. We have investigated their binding properties as well as their ability to activate the RANTES receptors CCR1, CCR3, and CCR5 in cell lines overexpressing these receptors. We show that Met-RANTES has weak activity in eliciting a calcium response in Chinese hamster ovary cells expressing CCR1, CCR3, and CCR5, whereas AOP-RANTES has full agonist activity on CCR5 but is less effective on CCR3 and CCR1. Their ability to induce chemotaxis of the murine pre-B lymphoma cell line, L1.2, transfected with the same receptors, consolidates these results. Monocytes have detectable mRNA for CCR1, CCR2, CCR3, CCR4, and CCR5, and they respond to the ligands for these receptors in chemotaxis but not always in calcium mobilization. AOP-RANTES does not induce calcium mobilization in circulating monocytes but is able to do so as these cells acquire the macrophage phenotype, which coincides with a concomitant up-regulation of CCR5. We have also tested the ability of both modified proteins to induce chemotaxis of freshly isolated monocytes and eosinophils. Cells from most donors do not respond, but occasionally cells from a particular donor do respond, particularly to AOP-RANTES. We therefore hypothesize that the occasional activity of AOP-RANTES to induce leukocyte chemotaxis is due to donor to donor variation of receptor expression.

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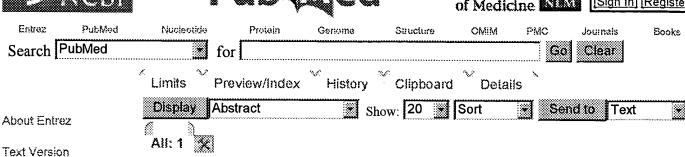
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Increased expression of the monocyte chemoattractant protein-1 in bronchial tissue from asthmatic subjects.

Sousa AR, Lane SJ, Nakhosteen JA, Yoshimura T, Lee TH, Poston RN.

Department of Experimental Pathology, U.M.D.S., Guy's Hospital, London, United Kingdom.

The expression of the monocyte chemoattractant protein (MCP-1), a member of the chemokine family of low molecular weight cytokines, was assessed by immunohistochemistry in bronchial biopsies from 12 asthmatic and 12 normal subjects. Both a monoclonal antibody (F9) and a polyclonal antibody were employed to detect MCP-1, while the mouse myeloma protein (MOPC21) was used as a negative control. Strong positive reactions for MCP-1 were seen in the bronchial epithelium. Subepithelial macrophages, blood vessels, and bronchial smooth muscle were also stained. Hue-saturation-intensity color image analysis was used to quantify reactions of the monoclonal antibody in the epithelial and subepithelial layers. With the monoclonal antibody, asthmatic biopsies showed 51.8 +/- 3.7% (mean +/- SEM) of the epithelium staining positively, whereas normal subjects reacted much less, with 6.4 +/-1.9% of the epithelium staining (P < 0.0001); there was no overlap between the two groups. Likewise, staining was increased in the subepithelium of asthmatic airway biopsies, with 11.5 +/- 3.1% and 2.0 +/- 1.0% staining positively in asthmatic and normal subepithelium, respectively, (P < 0.002). There was a significant correlation between staining of the epithelium and subepithelium (r = 0.77, P < 0.001). The polyclonal anti-MCP-1 antibody also gave strong reactions in the epithelium and subepithelium, with 34.0 +/- 7.8% of the asthmatic and 1.6 +/- 1.0% of the normal bronchial epithelium staining positively (P < 0.0001). These increased levels of MCP-1 in the asthmatic airways suggest that they may play a role in macrophage recruitment and activation and thereby contribute to the inflammatory pathology of bronchial asthma.

PMID: 8110469 [PubMed - indexed for MEDLINE]

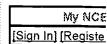
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Monocyte chemoattractant protein-1 in idiopathic pulmonary fibrosis and other interstitial lung diseases.

Iyonaga K, Takeya M, Saita N, Sakamoto O, Yoshimura T, Ando M, Takahashi K.

Second Department of Pathology, Kumamoto University School of Medicine, Japan.

Macrophages play a crucial role in the pathogenesis of idiopathic pulmonary fibrosis (IPF). To examine the mechanisms for increased monocyte/macrophage recruitment in IPF and nonIPF interstitial lung diseases (nonIPF) the localization of monocyte chemoattractant protein-1 (MCP-1) was investigated in 14 cases of IPF, seven cases of nonIPF, and seven normal control lungs (CTRL) by immunohistochemistry using a specific anti-MCP-1 monoclonal antibody, F9. By double immunohistochemical staining using F9 and one of the cell type specific antibodies significant differences in the staining pattern of MCP-1 were observed between IPF and nonIPF. In IPF MCP-1 was observed in cuboidal and flattened metaplastic epithelial cells, alveolar macrophages, and vascular endothelial cells. In contrast, no epithelial cells were stained for MCP-1 in nonIPF cases, although alveolar macrophages and vascular endothelial cells were labeled. Northern hybridization analysis of selected cases showed marked expression of MCP-1 messenger RNA (mRNA) in IPF and nonIPF compared with CTRL. These findings suggest that the MCP-1 production in IPF and nonIPF plays an important role in the recruitment of monocyte/macrophages. Monocyte chemoattractant protein-1 production by epithelial cells in IPF may be caused by the metaplastic nature of the epithelial cells and may be one of the key factors inducing the irreversible progression of IPF.

PMID: 8200639 [PubMed - indexed for MEDLINE]

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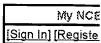
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Peptide mimics of monocyte chemoattractant protein-1 (MCP-1) with an antagonistic activity.

Kaji M, Ikari M, Hashiguchi S, Ito Y, Matsumoto R, Yoshimura T, Kuratsu Ji, Sugimura K.

Department of Bioengineering, Faculty of Engineering, Kagoshima University, Korimoto, Kagoshima 890-0065, Japan.

In this study, we attempted to analyze the peptide motifs recognized by 24822.111 and F9, monoclonal antibodies (mAbs) that inhibit the chemotactic activity of monocyte chemoattractant protein-1 (MCP-1), a member of the CC subfamily of chemokines. We isolated phage clones from a phage display library and identified six peptide motifs. One of these clones, C27, was strongly and specifically recognized by 24822.111 mAb, while another, G25, was similarly recognized by F9 mAb. Both the C27 motif and the G25 motif contain two cysteines in their sequences and have little homology to the primary amino acid sequence of MCP-1. These clones, however, bound to THP-1 cells, and the binding was competitively inhibited by MCP-1. The clones strongly inhibited the MCP-1-induced chemotaxis of human monocytes. The synthetic and intramolecularly disulfide-linked peptides of C27 and G25 (sC27 and sG25) also inhibited the chemotaxis induced by MCP-1, while their derivatives with serine in place of cysteine did not, suggesting the importance of the loop structure for the inhibition. These results suggest that sC27 and sG25 may mimic the MCP-1-binding domain to the MCP-1 receptor.

PMID: 11275557 [PubMed - indexed for MEDLINE]

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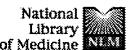
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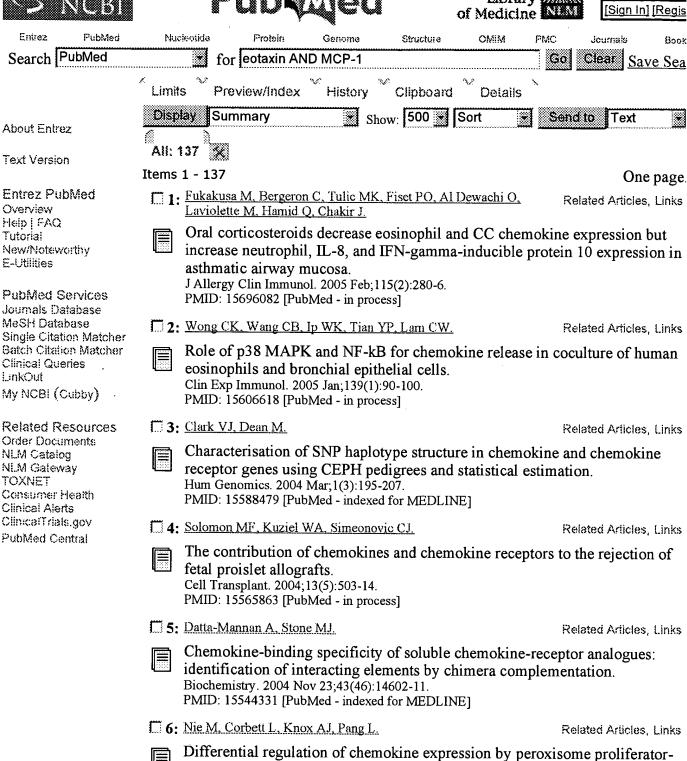
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J Biol Chem. 2005 Jan 28;280(4):2550-61. Epub 2004 Nov 05.

Transendothelial migration of human basophils. J Immunol. 2004 Oct 15;173(8):5189-95.

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17: Shakoory B, Fitzgerald SM, Lee SA, Chi DS, Krishnaswamy G Related Articles, Links The role of human mast cell-derived cytokines in eosinophil biology. J Interferon Cytokine Res. 2004 May;24(5):271-81. Review. PMID: 15153310 [PubMed - indexed for MEDLINE] 18: Kradin RL, Sakamoto H, Jain F, Zhao LH, Hymowitz G, Preffer F. Related Articles, Links IL-10 inhibits inflammation but does not affect fibrosis in the pulmonary response to bleomycin. Exp Mol Pathol. 2004 Jun;76(3):205-11. PMID: 15126102 [PubMed - indexed for MEDLINE] 19: Oynebraten I, Bakke O, Brandtzaeg P, Johansen FE, Haraldsen G. Related Articles, Links Rapid chemokine secretion from endothelial cells originates from 2 distinct compartments. Blood. 2004 Jul 15;104(2):314-20. Epub 2004 Mar 25. PMID: 15044249 [PubMed - indexed for MEDLINE] 20: Beck-Schimmer B, Romero B, Booy C, Joch H, Hallers U, Pasch T, Related Articles, Links Spahn DR. Release of inflammatory mediators in irradiated cell salvage blood and their biological consequences in human beings following transfusion. Eur J Anaesthesiol. 2004 Jan;21(1):46-52. PMID: 14768923 [PubMed - indexed for MEDLINE] 21: Leung TF, Ng PC, Tam WH, Li CY, Wong E, Ma TP, Lam CW. Related Articles, Links Fok TF. Helper T-lymphocyte-related chemokines in healthy newborns. Pediatr Res. 2004 Feb;55(2):334-8. Epub 2003 Nov 19. PMID: 14630994 [PubMed - indexed for MEDLINE] 22: Kim BH, Lee YS, Kang KS. Related Articles, Links The mechanism of retinol-induced irritation and its application to antiirritant development. Toxicol Lett. 2003 Dec 15;146(1):65-73. PMID: 14615068 [PubMed - indexed for MEDLINE] 23. Modi WS, Goedert JJ, Strathdee S, Buchbinder S, Detels R, Related Articles, Links Donfield S, O'Brien SJ, Winkler C. MCP-1-MCP-3-Eotaxin gene cluster influences HIV-1 transmission. AIDS. 2003 Nov 7;17(16):2357-65. PMID: 14571188 [PubMed - indexed for MEDLINE] 24: Moayeri M. Haines D. Young HA, Leppla SH. Related Articles, Links Bacillus anthracis lethal toxin induces TNF-alpha-independent hypoxiamediated toxicity in mice. J Clin Invest. 2003 Sep;112(5):670-82. PMID: 12952916 [PubMed - indexed for MEDLINE] 125: Wuyts WA, Vanaudenaerde BM, Dupont LJ, Demedts MG, Related Articles, Links Verleden GM. Modulation by cAMP of IL-1 beta-induced eotaxin and MCP-1 expression and release in human airway smooth muscle cells. Eur Respir J. 2003 Aug;22(2):220-6. PMID: 12952251 [PubMed - indexed for MEDLINE] 26: Leung TF, Ma KC, Hon KL, Lam CW, Wan H, Li CY, Chan IH. Related Articles, Links Serum concentration of macrophage-derived chemokine may be a useful inflammatory marker for assessing severity of atopic dermatitis in infants

b e

and young children.

Pediatr Allergy Immunol. 2003 Aug;14(4):296-301. PMID: 12911508 [PubMed - indexed for MEDLINE]

27: Wuyts WA, Vanaudenaerde BM, Dupont LJ, Demedts MG, Verleden GM.

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N-acetylcysteine reduces chemokine release via inhibition of p38 MAPK in human airway smooth muscle cells.

Eur Respir J. 2003 Jul;22(1):43-9.

PMID: 12882449 [PubMed - indexed for MEDLINE]

28: Sabatini F, Silvestri M, Sale R, Serpero L, Giuliani M, Scarso L, Favini P, Rossi GA.

Concentration-dependent effects of mometasone furoate and dexamethasone on foetal lung fibroblast functions involved in airway inflammation and remodeling.

Pulm Pharmacol Ther. 2003;16(5):287-97.

PMID: 12877820 [PubMed - indexed for MEDLINE]

29: Souto JT, Aliberti JC, Campanelli AP, Livonesi MC, Maffei CM. Related Articles, Links Ferreira BR, Travassos LR, Martinez R, Rossi MA, Silva JS



Chemokine production and leukocyte recruitment to the lungs of Paracoccidioides brasiliensis-infected mice is modulated by interferongamma.

Am J Pathol. 2003 Aug; 163(2):583-90.

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30: Wuyts WA, Vanaudenaerde BM, Dupont LJ, Demedts MG, Verleden GM.

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Involvement of p38 MAPK, JNK, p42/p44 ERK and NF-kappaB in IL-1beta-induced chemokine release in human airway smooth muscle cells. Respir Med. 2003 Jul;97(7):811-7.

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1 31: Helwig U. Gionchetti P. Rizzello F, Lammers K, Kuhbacher T, Schreiber S, Baggiolini M, Uguccioni M, Campieri M.

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CXC and CC chemokine expression in inflamed and noninflamed pelvic ileal pouch tissue.

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32: Jin H, Vicario PP, Zweerink H, Goyal S, Hanlon WA, Dorn CP, Mills SG, DeMartino JA, Cascieri MA, Struthers M.

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Expression and characterization of the chemokine receptor CCR2B from rhesus monkey.

Biochem Pharmacol. 2003 Jul 15;66(2):321-30. PMID: 12826275 [PubMed - indexed for MEDLINE]

33: Shibahara H, Hirano Y, Ayustawati, Kikuchi K, Taneichi A, Fujiwara H, Takamizawa S, Sato I.

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Chemokine bioactivity of RANTES is elevated in the sera of infertile women with past Chlamydia trachomatis infection.

Am J Reprod Immunol. 2003 Mar;49(3):169-73. PMID: 12797523 [PubMed - indexed for MEDLINE]

34: Richter M. Cantin AM, Beaulieu C, Cloutier A, Larivee P.

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Zinc chelators inhibit eotaxin, RANTES, and MCP-1 production in stimulated human airway epithelium and fibroblasts.

Am J Physiol Lung Cell Mol Physiol. 2003 Sep;285(3):L719-29. Epub 2003 May 23. PMID: 12765881 [PubMed - indexed for MEDLINE]

35: Cardona AE, Gonzalez PA, Teale JM. Related Articles, Links CC chemokines mediate leukocyte trafficking into the central nervous system during murine neurocysticercosis: role of gamma delta T cells in amplification of the host immune response. Infect Immun. 2003 May;71(5):2634-42. PMID: 12704138 [PubMed - indexed for MEDLINE] 36: Ogilvie P. Paoletti S. Clark-Lewis I, Uguccioni M. Related Articles, Links Eotaxin-3 is a natural antagonist for CCR2 and exerts a repulsive effect on human monocytes. Blood. 2003 Aug 1;102(3):789-94. Epub 2003 Apr 10. PMID: 12689946 [PubMed - indexed for MEDLINE] 37: Lambert AL, Trasti FS, Mangum JB, Everitt JL Related Articles, Links Effect of preexposure to ultrafine carbon black on respiratory syncytial virus infection in mice. Toxicol Sci. 2003 Apr;72(2):331-8. PMID: 12660365 [PubMed - indexed for MEDLINE] 1 38: Fukuma N, Akimitsu N, Hamamoto H, Kusuhara H, Sugiyama Y, Related Articles, Links Sekimizu K A role of the Duffy antigen for the maintenance of plasma chemokine concentrations. Biochem Biophys Res Commun. 2003 Mar 28;303(1):137-9. PMID: 12646177 [PubMed - indexed for MEDLINE] 39: Ichinose T, Takano H, Sadakane K, Yanagisawa R, Kawazato H, Related Articles, Links Sagai M, Shibamoto T. Differences in airway-inflammation development by house dust mite and diesel exhaust inhalation among mouse strains. Toxicol Appl Pharmacol. 2003 Feb 15;187(1):29-37. PMID: 12628582 [PubMed - indexed for MEDLINE] 40: Nasu K, Fukuda J, Sun B, Nishida M, Miyakawa I. Related Articles, Links Interleukin-13 and tumor necrosis factor-beta differentially regulate the production of cytokines by cultured human endometrial stromal cells. Fertil Steril. 2003 Mar;79 Suppl 1:821-7. PMID: 12620497 [PubMed - indexed for MEDLINE] 41: Solomon MF, Kuziel WA, Mann DA, Simeonovic CJ. Related Articles, Links The role of chemokines and their receptors in the rejection of pig islet tissue xenografts. Xenotransplantation. 2003 Mar; 10(2):164-77. PMID: 12588649 [PubMed - indexed for MEDLINE] 42: Benarafa C, Collins ME, Hamblin AS, Cunningham FM. Related Articles, Links Role of the chemokine eotaxin in the pathogenesis of equine sweet itch. Vet Rec. 2002 Dec 7;151(23):691-3. PMID: 12503787 [PubMed - indexed for MEDLINE] 43: Pellegrino A, Vacca A, Scavelli C, Dammacco F. Related Articles, Links [Chemokines and tumors] Recenti Prog Med. 2002 Nov;93(11):642-54. Review. Italian. PMID: 12489485 [PubMed - indexed for MEDLINE] 44: Heinemann A, Ofner M, Amann R, Peskar BA Related Articles, Links A novel assay to measure the calcium flux in human basophils: effects of chemokines and nerve growth factor.

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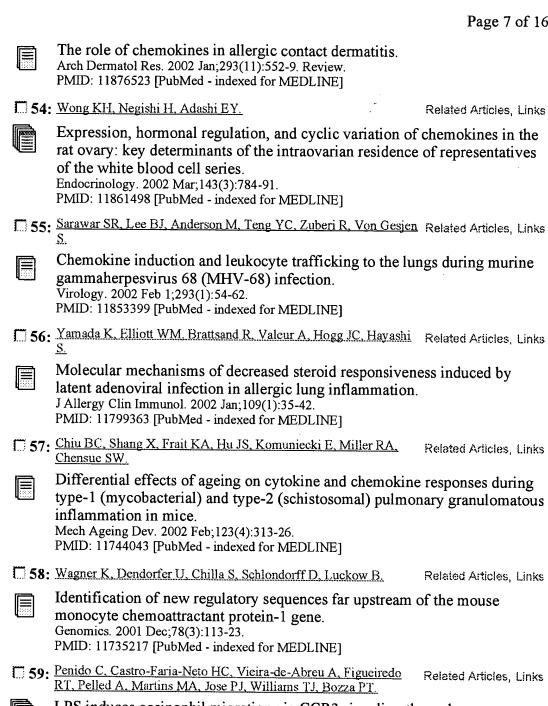
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PMID: 11884467 [PubMed - indexed for MEDLINE]

53: Sebastiani S, Albanesi C, De PO, Puddu P, Cavani A, Girolomoni Related Articles, Links



LPS induces eosinophil migration via CCR3 signaling through a mechanism independent of RANTES and Eotaxin. Am J Respir Cell Mol Biol. 2001 Dec;25(6):707-16.

PMID: 11726396 [PubMed - indexed for MEDLINE]

60: Melter M, Exeni A, Reinders ME, Fang JC, McMahon G, Ganz P, Related Articles, Links Hancock WW, Briscoe DM.

Expression of the chemokine receptor CXCR3 and its ligand IP-10 during human cardiac allograft rejection.

Circulation. 2001 Nov 20;104(21):2558-64. PMID: 11714650 [PubMed - indexed for MEDLINE]

61: Power UF, Huss T, Michaud V, Plotnicky-Gilquin H, Bonnefoy JY, Related Articles, Links Nguyen TN.

Differential histopathology and chemokine gene expression in lung tissues following respiratory syncytial virus (RSV) challenge of formalininactivated RSV- or BBG2Na-immunized mice.

J Virol. 2001 Dec;75(24):12421-30.

PMID: 11711632 [PubMed - indexed for MEDLINE]

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е

e fcg

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b e

62: Swift ME, Burns AL, Gray KL, DiPietro LA. Related Articles, Links Age-related alterations in the inflammatory response to dermal injury. J Invest Dermatol. 2001 Nov;117(5):1027-35. PMID: 11710909 [PubMed - indexed for MEDLINE] 63: Debreceni A, Okazaki K, Matsushima Y, Ohana M, Nakase H. Related Articles, Links Uchida K, Uose S, Chiba T. mRNA expression of cytokines and chemokines in the normal gastric surface mucous epithelial cell line GSM06 during bacterial infection with Helicobacter felis. J Physiol Paris. 2001 Jan-Dec; 95(1-6): 461-7. PMID: 11595476 [PubMed - indexed for MEDLINE] 64: Ragno S, Romano M, Howell S, Pappin DJ, Jenner PJ, Colston MJ. Related Articles, Links Changes in gene expression in macrophages infected with Mycobacterium tuberculosis: a combined transcriptomic and proteomic approach. Immunology. 2001 Sep; 104(1):99-108. PMID: 11576227 [PubMed - indexed for MEDLINE] 65: Martinelli R, Sabroe I, LaRosa G, Williams TJ, Pease JE: Related Articles, Links The CC chemokine eotaxin (CCL11) is a partial agonist of CC chemokine J Biol Chem. 2001 Nov 16;276(46):42957-64. Epub 2001 Sep 14. PMID: 11559700 [PubMed - indexed for MEDLINE] 66: Kaburagi Y, Shimada Y, Nagaoka T. Hasegawa M, Takehara K. Related Articles, Links Sato S. Enhanced production of CC-chemokines (RANTES, MCP-1, MIP-1alpha, MIP-1beta, and eotaxin) in patients with atopic dermatitis. Arch Dermatol Res. 2001 Jul;293(7):350-5. PMID: 11550808 [PubMed - indexed for MEDLINE] 67: Economou E, Tousoulis D, Katinioti A, Stefanadis C, Trikas A. Related Articles, Links Pitsavos C, Tentolouris C, Toutouza MG, Toutouzas P. Chemokines in patients with ischaemic heart disease and the effect of coronary angioplasty. Int J Cardiol. 2001 Aug;80(1):55-60. PMID: 11532547 [PubMed - indexed for MEDLINE] 1 68: Tateno H, Nakamura H, Minematsu N, Amakawa K, Terashima T, Related Articles, Links Fujishima S, Luster AD, Lilly CM, Yamaguchi K. Eotaxin and monocyte chemoattractant protein-1 in chronic eosinophilic pneumonia. Eur Respir J. 2001 May;17(5):962-8. PMID: 11488333 [PubMed - indexed for MEDLINE] 69: Nakahara Y, Hayashi S, Fukuno Y, Kawashima M, Yatsunami J. Related Articles, Links Increased interleukin-5 levels in bronchoalveolar lavage fluid is a major factor for eosinophil accumulation in acute eosinophilic pneumonia. Respiration. 2001;68(4):389-95. PMÎD: 11464086 [PubMed - indexed for MEDLINE] 70: Watanabe Y, Hashizume M, Kataoka S, Hamaguchi E, Morimoto Related Articles, Links N. Tsuru S. Katoh S. Miyake K. Matsushima K. Tominaga M. Kurashige T. Fujimoto S. Kincade PW, Tominaga A. Differentiation stages of eosinophils characterized by hyaluronic acid binding via CD44 and responsiveness to stimuli. DNA Cell Biol. 2001 Apr;20(4):189-202. PMID: 11403716 [PubMed - indexed for MEDLINE]

71: Sundstrom JB, McMullan LK, Spiropoulou CF, Hooper WC, Related Articles, Links Ansari AA, Peters CJ, Rollin PE. Hantavirus infection induces the expression of RANTES and IP-10 without causing increased permeability in human lung microvascular endothelial J Virol. 2001 Jul;75(13):6070-85. PMID: 11390609 [PubMed - indexed for MEDLINE] 72: Chen X, Oppenheim J, Howard OM. Related Articles, Links Shikonin, a component of antiinflammatory Chinese herbal medicine, selectively blocks chemokine binding to CC chemokine receptor-1. Int Immunopharmacol. 2001 Feb;1(2):229-36. PMID: 11360924 [PubMed - indexed for MEDLINE] 73: Miotto D, Christodoulopoulos P, Olivenstein R, Taha R, Cameron Related Articles, Links L. Tsicopoulos A. Tonnel AB, Fahy O, Lafitte JJ, Luster AD, Wallacrt B, Mapp CE, Hamid Q. Expression of IFN-gamma-inducible protein; monocyte chemotactic proteins 1, 3, and 4; and eotaxin in TH1- and TH2-mediated lung diseases. J Allergy Clin Immunol. 2001 Apr;107(4):664-70. PMID: 11295656 [PubMed - indexed for MEDLINE] 74: Qiu B, Frait KA, Reich F, Komuniecki E, Chensue SW. Related Articles, Links Chemokine expression dynamics in mycobacterial (type-1) and schistosomal (type-2) antigen-elicited pulmonary granuloma formation. Am J Pathol. 2001 Apr;158(4):1503-15. PMID: 11290568 [PubMed - indexed for MEDLINE] 75: Ogilvie P, Bardi G, Clark-Lewis I, Baggiolini M, Uguccioni M. Related Articles, Links Eotaxin is a natural antagonist for CCR2 and an agonist for CCR5. Blood. 2001 Apr 1:97(7):1920-4. PMID: 11264152 [PubMed - indexed for MEDLINE] 76: Fujikura T. Shimosawa T. Yakuo I. Related Articles, Links Regulatory effect of histamine H1 receptor antagonist on the expression of messenger RNA encoding CC chemokines in the human nasal mucosa. J Allergy Clin Immunol. 2001 Jan; 107(1):123-8. PMID: 11150001 [PubMed - indexed for MEDLINE] 77: Haeberle HA, Kuziel WA, Dieterich HJ, Casola A, Gatalica Z. Related Articles, Links Garofalo RP Inducible expression of inflammatory chemokines in respiratory syncytial virus-infected mice: role of MIP-1alpha in lung pathology. J Virol. 2001 Jan;75(2):878-90. PMID: 11134301 [PubMed - indexed for MEDLINE] 78: Heinemann A, Hartnell A, Stubbs VE, Murakami K, Soler D, Related Articles, Links LaRosa G, Askenase PW, Williams TJ, Sabroe I. Basophil responses to chemokines are regulated by both sequential and cooperative receptor signaling. J Immunol. 2000 Dec 15;165(12):7224-33. PMID: 11120855 [PubMed - indexed for MEDLINE] 79: Abu El-Asrar AM, Struyf S, Al-Kharashi SA, Missotten L, Van Related Articles, Links Damme J. Geboes K. Chemokines in the limbal form of vernal keratoconjunctivitis. Br J Ophthalmol. 2000 Dec;84(12):1360-6. PMID: 11090473 [PubMed - indexed for MEDLINE]

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Benarafa C, Cunningham FM, Hamblin AS, Horohov DW, Collins

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e fcg

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□ 80: ME. Related Articles, Links Cloning of equine chemokines eotaxin, monocyte chemoattractant protein (MCP)-1, MCP-2 and MCP-4, mRNA expression in tissues and induction by IL-4 in dermal fibroblasts. Vet Immunol Immunopathol. 2000 Oct 31;76(3-4):283-98. PMID: 11044560 [PubMed - indexed for MEDLINE] 81: Katoh S. Matsumoto N, Fukushima K, Mukae H, Kadota JI, Kohno Related Articles, Links S. Matsukura S. Elevated chemokine levels in bronchoalveolar lavage fluid of patients with eosinophilic pneumonia. J Allergy Clin Immunol. 2000 Oct;106(4):730-6. PMID: 11031344 [PubMed - indexed for MEDLINE] 82: Matikainen S, Pirhonen J, Miettinen M, Lehtonen A, Govenius-Related Articles, Links Vintola C. Sareneva T. Julkunen I. Influenza A and sendai viruses induce differential chemokine gene expression and transcription factor activation in human macrophages. Virology. 2000 Oct 10;276(1):138-47. PMID: 11022002 [PubMed - indexed for MEDLINE] 83: Allakhverdi Z. Lamkhioued B. Olivenstein R. Hamid Q. Renzi PM. Related Articles, Links CD8 depletion-induced late airway response is characterized by eosinophilia, increased eotaxin, and decreased IFN-gamma expression in rats. Am J Respir Crit Care Med. 2000 Sep;162(3 Pt 1):1123-31. PMID: 10988141 [PubMed - indexed for MEDLINE] 84: Fujisawa T, Kato Y, Nagase H, Atsuta J, Terada A, Iguchi K, Related Articles, Links Kamiya H, Morita Y, Kitaura M, Kawasaki H, Yoshie O, Hirai K. Chemokines induce eosinophil degranulation through CCR-3. J Allergy Clin Immunol. 2000 Sep;106(3):507-13. PMID: 10984371 [PubMed - indexed for MEDLINE] 85: Peebles RS Jr, Dworski R, Collins RD, Jarzecka K, Mitchell DB, Related Articles, Links Graham BS, Sheller JR. Cyclooxygenase inhibition increases interleukin 5 and interleukin 13 production and airway hyperresponsiveness in allergic mice. Am J Respir Crit Care Med. 2000 Aug;162(2 Pt 1):676-81. PMID: 10934105 [PubMed - indexed for MEDLINE] 86: Tillie-Leblond I, Hammad H, Desurmont S, Pugin J, Wallaert B, Related Articles, Links Tonnel AB, Gosset P. CC chemokines and interleukin-5 in bronchial lavage fluid from patients with status asthmaticus. Potential implication in eosinophil recruitment. Am J Respir Crit Care Med. 2000 Aug;162(2 Pt 1):586-92. PMID: 10934091 [PubMed - indexed for MEDLINE] 87: Jinquan T, Jacobi HH, Jing C, Reimert CM, Quan S, Dissing S, Related Articles, Links Poulsen LK, Skov PS. Chemokine stromal cell-derived factor 1alpha activates basophils by means 111 of CXCR4. J Allergy Clin Immunol. 2000 Aug;106(2):313-20. PMID: 10932076 [PubMed - indexed for MEDLINE] 88: Yokoyama A, Kohno N, Ito M, Abe M, Hiwada K, Yamada H, Related Articles, Links Matsushima K, Hirai K. Eotaxin levels in pleural effusions: comparison with monocyte chemoattractant protein-1 and IL-8. Intern Med. 2000 Jul;39(7):547-52.

b e

e ch

PMID: 10888210 [PubMed - indexed for MEDLINE] 89: Shiraishi M. Aramaki Y. Seto M. Imoto H. Nishikawa Y. Kanzaki Related Articles, Links N, Okamoto M, Sawada H, Nishimura O, Baba M, Fujino M. Discovery of novel, potent, and selective small-molecule CCR5 antagonists as anti-HIV-1 agents: synthesis and biological evaluation of anilide derivatives with a quaternary ammonium moiety. J Med Chem. 2000 May 18;43(10):2049-63. PMID: 10821717 [PubMed - indexed for MEDLINE] 90: Keizer DW, Crump MP, Lee TW, Slupsky CM, Clark-Lewis I. Related Articles, Links Sykes BD. Human CC chemokine I-309, structural consequences of the additional disulfide bond. Biochemistry. 2000 May 23;39(20):6053-9. PMID: 10821677 [PubMed - indexed for MEDLINE] 91: Winsor GL, Waterhouse CC, MacLellan RL, Stadnyk AW. Related Articles, Links Interleukin-4 and IFN-gamma differentially stimulate macrophage chemoattractant protein-1 (MCP-1) and eotaxin production by intestinal epithelial cells. J Interferon Cytokine Res. 2000 Mar; 20(3):299-308. PMID: 10762077 [PubMed - indexed for MEDLINE] 92: Brouty-Boye D, Pottin-Clemenceau C, Doucet C, Jasmin C. Related Articles, Links Azzarone B. Chemokines and CD40 expression in human fibroblasts. Eur J Immunol. 2000 Mar;30(3):914-9. PMID: 10741409 [PubMed - indexed for MEDLINE] 93: Votta BJ, White JR, Dodds RA, James IE, Connor JR, Lee-Related Articles, Links Rykaczewski E, Eichman CF, Kumar S, Lark MW, Gowen M. CKbeta-8 [CCL23], a novel CC chemokine, is chemotactic for human osteoclast precursors and is expressed in bone tissues. J Cell Physiol. 2000 May; 183(2):196-207. PMID: 10737895 [PubMed - indexed for MEDLINE] 94: Schweickart VL, Epp A, Raport CJ, Gray PW. Related Articles, Links CCR11 is a functional receptor for the monocyte chemoattractant protein family of chemokines. J Biol Chem. 2000 Mar 31;275(13):9550-6. PMID: 10734104 [PubMed - indexed for MEDLINE] 95: Johnston CJ, Oberdorster G, Gelein R, Finkelstein JN. Related Articles, Links Newborn mice differ from adult mice in chemokine and cytokine expression to ozone, but not to endotoxin. Inhal Toxicol. 2000 Mar;12(3):205-24. PMID: 10715625 [PubMed - indexed for MEDLINE] 96: Johnston CJ, Reed CK, Avissar NE, Gelein R, Finkelstein JN. Related Articles, Links Antioxidant and inflammatory response after acute nitrogen dioxide and ozone exposures in C57Bl/6 mice. Inhal Toxicol. 2000 Mar;12(3):187-203. PMID: 10715624 [PubMed - indexed for MEDLINE] 97: Braun MC, Lahey E, Kelsall BL. Related Articles, Links Selective suppression of IL-12 production by chemoattractants.

h cb hg e e e fcg e ch b e

J Immunol. 2000 Mar 15;164(6):3009-17.

PMID: 10706689 [PubMed - indexed for MEDLINE]

98: Banas B, Luckow B, Moller M, Klier C, Nelson PJ, Schadde E, Related Articles, Links Brigl M, Halevy D, Holthofer H, Reinhart B, Schlondorff D. Chemokine and chemokine receptor expression in a novel human mesangial cell line. J Am Soc Nephrol. 1999 Nov;10(11):2314-22. PMID: 10541290 [PubMed - indexed for MEDLINE] 99: Yamagami S, Miyazaki D, Ono SJ, Dana MR. Related Articles, Links Differential chemokine gene expression in corneal transplant rejection. Invest Ophthalmol Vis Sci. 1999 Nov;40(12):2892-7. PMID: 10549649 [PubMed - indexed for MEDLINE] 100: Becker S, Soukup JM. Related Articles, Links Airway epithelial cell-induced activation of monocytes and eosinophils in respiratory syncytial viral infection. Immunobiology. 1999 Sep;201(1):88-106. PMID: 10532283 [PubMed - indexed for MEDLINE] 101: Pype JL, Dupont LJ, Menten P, Van Coillie E, Opdenakker G. Related Articles, Links Van Damme J, Chung KF, Demedts MG, Verleden GM Expression of monocyte chemotactic protein (MCP)-1, MCP-2, and MCP-3 by human airway smooth-muscle cells. Modulation by corticosteroids and T-helper 2 cytokines. Am J Respir Cell Mol Biol. 1999 Oct;21(4):528-36. PMID: 10502563 [PubMed - indexed for MEDLINE] 102: Blanpain C, Migeotte I, Lee B, Vakili J, Doranz BJ, Govaerts C, Related Articles, Links Vassart G, Doms RW, Parmentier M. CCR5 binds multiple CC-chemokines: MCP-3 acts as a natural antagonist. Blood. 1999 Sep 15;94(6):1899-905. PMID: 10477718 [PubMed - indexed for MEDLINE] 103: Campbell EM, Charo IF, Kunkel SL, Strieter RM, Boring L. Related Articles, Links Gosling J. Lukacs NW. Monocyte chemoattractant protein-1 mediates cockroach allergen-induced bronchial hyperreactivity in normal but not CCR2-/- mice: the role of mast J Immunol. 1999 Aug 15;163(4):2160-7. PMID: 10438957 [PubMed - indexed for MEDLINE] 104: Tedla N. Palladinetti P. Wakefield D. Lloyd A. Related Articles, Links Abundant expression of chemokines in malignant and infective human lymphadenopathies. Cytokine. 1999 Jul;11(7):531-40. PMID: 10419655 [PubMed - indexed for MEDLINE] 105: Morita A, Shimosako K, Kikuoka S, Taniguchi Y, Kitaura M, Related Articles, Links Sasakura K. Tamaki M, Tsuji T, Teraoka H, Yoshie O, Nakajima T, Hirai K Development of a sensitive enzyme-linked immunosorbent assay for eotaxin and measurement of its levels in human blood. J Immunol Methods. 1999 Jun 24;226(1-2):159-67. PMID: 10410981 [PubMed - indexed for MEDLINE] 106: Miyamasu M. Yamaguchi M. Nakajima T. Misaki Y. Morita Y. Related Articles, Links Matsushima K, Yamamoto K, Hirai K. Th1-derived cytokine IFN-gamma is a potent inhibitor of eotaxin synthesis in vitro.

h cb hgeeefcg ech be

Int Immunol. 1999 Jun;11(6):1001-4.

PMID: 10360975 [PubMed - indexed for MEDLINE]

107: Sabroe I, Hartnell A, Jopling LA, Bel S, Ponath PD, Pease JE, Related Articles, Links Collins PD, Williams TJ. Differential regulation of eosinophil chemokine signaling via CCR3 and non-CCR3 pathways. J Immunol. 1999 Mar 1;162(5):2946-55. PMID: 10072545 [PubMed - indexed for MEDLINE] 108: Kohyama T, Takizawa H, Kawasaki S, Akiyama N, Sato M, Ito Related Articles, Links K, Yamamoto K. A potent immunosuppressant FK506 inhibits IL-8 expression in human eosinophils. Mol Cell Biol Res Commun. 1999 Apr;1(1):72-7. PMID: 10329481 [PubMed - indexed for MEDLINE] 109: Johnston CJ, Finkelstein JN, Gelein R, Oberdorster G. Related Articles, Links Pulmonary cytokine and chemokine mRNA levels after inhalation of lipopolysaccharide in C57BL/6 mice. Toxicol Sci. 1998 Dec;46(2):300-7. PMID: 10048133 [PubMed - indexed for MEDLINE] 110: Tiberghien F. Didier A. Bohbot A. Loor F. Related Articles, Links The MultiScreen filtration system to measure chemoattractant-induced release of leukocyte granule enzymes by differentiated HL-60 cells or normal human monocytes. J Immunol Methods. 1999 Feb 1;223(1):63-75. PMID: 10037235 [PubMed - indexed for MEDLINE] 111: Johnston CJ, Finkelstein JN, Oberdorster G, Reynolds SD, Stripp Related Articles, Links BR. Clara cell secretory protein-deficient mice differ from wild-type mice in inflammatory chemokine expression to oxygen and ozone, but not to endotoxin. Exp Lung Res. 1999 Jan-Feb;25(1):7-21. PMID: 10027076 [PubMed - indexed for MEDLINE] 112: Hughes AL, Yeager M. Related Articles, Links Coevolution of the mammalian chemokines and their receptors. Immunogenetics. 1999 Feb;49(2):115-24. PMID: 9887348 [PubMed - indexed for MEDLINE] 113: Hogaboam CM, Gallinat CS, Bone-Larson C, Chensue SW, Related Articles, Links Lukacs NW, Stricter RM, Kunkel SL. Collagen deposition in a non-fibrotic lung granuloma model after nitric oxide inhibition. Am J Pathol. 1998 Dec; 153(6):1861-72. PMID: 9846976 [PubMed - indexed for MEDLINE] 114: Pennington HL, Wilce PA, Worrall S. Related Articles, Links Chemokine and cell adhesion molecule mRNA expression and neutrophil infiltration in lipopolysaccharide-induced hepatitis in ethanol-fed rats. Alcohol Clin Exp Res. 1998 Nov;22(8):1713-8. PMID: 9835285 [PubMed - indexed for MEDLINE] 115: Albini A, Ferrini S, Benelli R, Sforzini S, Giunciuglio D, Aluigi Related Articles, Links MG, Proudfoot AE, Alouani S, Wells TN, Mariani G, Rabin RL, Farber JM, Noonan DM HIV-1 Tat protein mimicry of chemokines. Proc Natl Acad Sci U S A. 1998 Oct 27;95(22):13153-8. PMID: 9789057 [PubMed - indexed for MEDLINE]

h cb hg e e e fcg e ch b e

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cb

h g

e fcg

e ch

b e

116: Crump MP, Rajarathnam K, Kim KS, Clark-Lewis I, Sykes BD. Related Articles, Links Solution structure of eotaxin, a chemokine that selectively recruits eosinophils in allergic inflammation. J Biol Chem. 1998 Aug 28;273(35):22471-9. PMID: 9712872 [PubMed - indexed for MEDLINE] 117: Teixeira MM, Williams TJ, Hellewell PG. Related Articles, Links Description of an in vivo model for the assessment of eosinophil chemoattractants in the mouse. Mem Inst Oswaldo Cruz. 1997;92 Suppl 2:211-4. PMID: 9698936 [PubMed - indexed for MEDLINE] 118. Hadida F, Vieillard V, Autran B, Clark-Lewis I, Baggiolini M. Related Articles, Links Debre P. HIV-specific T cell cytotoxicity mediated by RANTES via the chemokine receptor CCR3. J Exp Med. 1998 Aug 3;188(3):609-14. PMID: 9687538 [PubMed - indexed for MEDLINE] 119: Gonzalo JA, Lloyd CM, Wen D, Albar JP, Wells TN, Prondfoot Related Articles, Links A. Martinez-A C. Dorf M. Bjerke T. Coyle AJ, Gutierrez-Ramos The coordinated action of CC chemokines in the lung orchestrates allergic inflammation and airway hyperresponsiveness. J Exp Med. 1998 Jul 6;188(1):157-67. PMID: 9653092 [PubMed - indexed for MEDLINE] 120: Johnston CJ, Wright TW, Rubin P, Finkelstein JN. Related Articles, Links Alterations in the expression of chemokine mRNA levels in fibrosis-resistant and -sensitive mice after thoracic irradiation. Exp Lung Res. 1998 May-Jun;24(3):321-37. PMID: 9635254 [PubMed - indexed for MEDLINE] 121: Carr DJ. Noisakran S, Halford WP, Lukacs N, Asensio V. Related Articles, Links Campbell IL. Cytokine and chemokine production in HSV-1 latently infected trigeminal ganglion cell cultures: effects of hyperthermic stress. J Neuroimmunol. 1998 May 15;85(2):111-21. PMID: 9630159 [PubMed - indexed for MEDLINE] 122: Bacon KB, Schall TJ, Dairaghi DJ. Related Articles, Links RANTES activation of phospholipase D in Jurkat T cells: requirement of GTP-binding proteins ARF and RhoA. J Immunol. 1998 Feb 15;160(4):1894-900. PMID: 9469451 [PubMed - indexed for MEDLINE] 123: Chensue SW, Warmington K, Ruth JH, Lukacs N, Kunkel SL. Related Articles, Links Mycobacterial and schistosomal antigen-elicited granuloma formation in IFN-gamma and IL-4 knockout mice: analysis of local and regional cytokine and chemokine networks. J Immunol. 1997 Oct 1;159(7):3565-73. Erratum in: J Immunol 1999 Mar 1;162(5):3106. PMID: 9317156 [PubMed - indexed for MEDLINE] 124: Uguccioni M, Mackay CR, Ochensberger B, Loetscher P, Rhis S, Related Articles, Links LaRosa GJ, Rao P, Ponath PD, Baggiolini M, Dahinden CA. High expression of the chemokine receptor CCR3 in human blood basophils. Role in activation by eotaxin, MCP-4, and other chemokines. J Clin Invest. 1997 Sep 1;100(5):1137-43.

PMID: 9276730 [PubMed - indexed for MEDLINE]

125: Ayehunie S, Garcia-Zepeda EA, Hoxie JA, Horuk R, Kupper TS. Related Articles, Links Luster AD, Ruprecht RM. Human immunodeficiency virus-1 entry into purified blood dendritic cells

> through CC and CXC chemokine coreceptors. Blood. 1997 Aug 15;90(4):1379-86.

PMID: 9269754 [PubMed - indexed for MEDLINE]

126: Sozzani S, Luini W, Borsatti A, Polentarutti N, Zhou D, Piemonti Related Articles, Links L. D'Amico G, Power CA, Wells TN, Gobbi M, Allavena P. Mantovani A

Receptor expression and responsiveness of human dendritic cells to a defined set of CC and CXC chemokines.

J Immunol. 1997 Aug 15;159(4):1993-2000. PMID: 9257866 [PubMed - indexed for MEDLINE]

127: Berkhout TA, Sarau HM, Moores K, White JR, Elshourbagy N, Related Articles, Links Appelbaum E, Reape RJ, Brawner M, Makwana J, Foley JJ, Schmidt DB, Imburgia C, McNulty D, Matthews J, O'Donnell K, O'Shannessy D, Scott M, Groot PH, Macphee C.

Cloning, in vitro expression, and functional characterization of a novel human CC chemokine of the monocyte chemotactic protein (MCP) family (MCP-4) that binds and signals through the CC chemokine receptor 2B. J Biol Chem. 1997 Jun 27;272(26):16404-13. PMID: 9195948 [PubMed - indexed for MEDLINE]

128: Yoshida R, Imai T, Hieshima K, Kusuda J, Baba M, Kitaura M, Related Articles, Links Nishimura M, Kakizaki M, Nomiyama H, Yoshie O

Molecular cloning of a novel human CC chemokine EBI1-ligand chemokine that is a specific functional ligand for EBI1, CCR7. J Biol Chem. 1997 May 23;272(21):13803-9. PMID: 9153236 [PubMed - indexed for MEDLINE]

129: Izumi S, Hirai K, Miyamasu M, Takahashi Y, Misaki Y, Takaishi Related Articles, Links T, Morita Y, Matsushima K, Ida N, Nakamura H, Kasahara T, Ito

Expression and regulation of monocyte chemoattractant protein-1 by 1 human eosinophils.

Eur J Immunol. 1997 Apr;27(4):816-24. PMID: 9130630 [PubMed - indexed for MEDLINE]

130: Van Coillie E, Fiten P, Nomiyama H, Sakaki Y, Miura R, Yoshie Related Articles, Links O, Van Damme J, Opdenakker G.

The human MCP-2 gene (SCYA8): cloning, sequence analysis, tissue expression, and assignment to the CC chemokine gene contig on chromosome 17g11.2.

Genomics. 1997 Mar 1;40(2):323-31.

PMID: 9119400 [PubMed - indexed for MEDLINE]

131: Garcia-Zepeda EA, Combadiere C, Rothenberg ME, Sarafi MN, Related Articles, Links Lavigne F, Hamid Q, Murphy PM, Luster AD.

Human monocyte chemoattractant protein (MCP)-4 is a novel CC chemokine with activities on monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3.

J Immunol. 1996 Dec 15;157(12):5613-26.

PMID: 8955214 [PubMed - indexed for MEDLINE]

132: Loetscher M, Gerber B, Loetscher P, Jones SA, Piali L, Clark-Related Articles, Links Lewis I, Baggiolini M, Moser B.



Chemokine receptor specific for IP10 and mig: structure, function, and expression in activated T-lymphocytes.

J Exp Med. 1996 Sep 1;184(3):963-9.

PMID: 9064356 [PubMed - indexed for MEDLINE]

133: Uguccioni M, Loetscher P, Forssmann U, Dewald B, Li H, Lima Related Articles, Links SH, Li Y, Kreider B, Garotta G, Thelen M, Baggiolini M.



Monocyte chemotactic protein 4 (MCP-4), a novel structural and functional analogue of MCP-3 and eotaxin.

J Exp Med. 1996 May 1;183(5):2379-84.

PMID: 8642349 [PubMed - indexed for MEDLINE]

134: Daugherty BL, Siciliano SJ, DeMartino JA, Malkowitz L, Sirotina Related Articles, Links A. Springer MS.



Cloning, expression, and characterization of the human eosinophil eotaxin receptor.

J Exp Med. 1996 May 1;183(5):2349-54.

PMID: 8642344 [PubMed - indexed for MEDLINE]

135: Post TW, Bozic CR, Rothenberg ME, Luster AD, Gerard N. Related Articles, Links Gerard C.



Molecular characterization of two murine eosinophil beta chemokine receptors.

J Immunol. 1995 Dec 1;155(11):5299-305.

PMID: 7594543 [PubMed - indexed for MEDLINE]

136: Rothenberg ME, Luster AD, Lilly CM, Drazen JM, Leder P.

Related Articles, Links



Constitutive and allergen-induced expression of eotaxin mRNA in the guinea pig lung.

J Exp Med. 1995 Mar 1;181(3):1211-6.

PMID: 7869037 [PubMed - indexed for MEDLINE]

137: Jose PJ, Griffiths-Johnson DA, Collins PD, Walsh DT, Moqbel R, Related Articles, Links Totty NF, Truong O, Hsuan JJ, Williams TJ.



Eotaxin: a potent eosinophil chemoattractant cytokine detected in a guinea pig model of allergic airways inflammation.

JExp Med. 1994 Mar 1;179(3):881-7.

PMID: 7509365 [PubMed - indexed for MEDLINE]

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CCL11 (Eotaxin) induces CCR3-dependent smooth muscle cell migration. Arterioscler Thromb Vasc Biol. 2004 Jul;24(7):1211-6. Epub 2004 May 06.

PMID: 15130922 [PubMed - indexed for MEDLINE] 8: Petkovic V, Moghini C, Paoletti S, Uguccioni M, Gerber B.

Eotaxin-3/CCL26 is a natural antagonist for CC chemokine receptors 1 and

h

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Taubman MB.

e ch

b e

Related Articles, Links



5. A human chemokine with a regulatory role.

J Biol Chem. 2004 May 28;279(22):23357-63. Epub 2004 Mar 23.

PMID: 15039444 [PubMed - indexed for MEDLINE]

9: Chung IY, Kim YH, Choi MK, Noh YJ, Park CS, Kwon do Y, Lee Related Articles, Links DY, Lee YS, Chang HS, Kim KS.

Eotaxin and monocyte chemotactic protein-3 use different modes of action. Biochem Biophys Res Commun. 2004 Feb 6;314(2):646-53. PMID: 14733956 [PubMed - indexed for MEDLINE]

10: Jin H, Vicario PP, Zweerink H, Goyal S, Hanlon WA, Dom CP. Related Articles, Links Mills SG, DeMartino JA, Cascieri MA, Struthers M.

Expression and characterization of the chemokine receptor CCR2B from rhesus monkey.

Biochem Pharmacol. 2003 Jul 15;66(2):321-30. PMID: 12826275 [PubMed - indexed for MEDLINE]

11: Ogilvie P. Paoletti S. Clark-Lewis I, Uguccioni M.

Related Articles, Links

Eotaxin-3 is a natural antagonist for CCR2 and exerts a repulsive effect on human monocytes.

Blood. 2003 Aug 1;102(3):789-94. Epub 2003 Apr 10. PMID: 12689946 [PubMed - indexed for MEDLINE]

12: Solomon MF, Kuziel WA, Mann DA, Simeonovic CJ.

Related Articles, Links

The role of chemokines and their receptors in the rejection of pig islet tissue xenografts.

Xenotransplantation. 2003 Mar;10(2):164-77. PMID: 12588649 [PubMed - indexed for MEDLINE]

13: Corcione A, Tortolina G, Bonecchi R, Battilana N, Taborelli G, Malavasi F, Sozzani S, Ottonello L, Dallegri F, Pistoia V.

Related Articles, Links



Chemotaxis of human tonsil B lymphocytes to CC chemokine receptor (CCR) 1, CCR2 and CCR4 ligands is restricted to non-germinal center cells.

Int Immunol. 2002 Aug;14(8):883-92.

PMID: 12147625 [PubMed - indexed for MEDLINE]

14: Borchers MT, Ansay T, DeSalle R, Daugherty BL, Shen H, Metzger M, Lee NA, Lee JJ.

Related Articles, Links



In vitro assessment of chemokine receptor-ligand interactions mediating mouse eosinophil migration.

J Leukoc Biol. 2002 Jun;71(6):1033-41.

PMID: 12050190 [PubMed - indexed for MEDLINE]

15: Traynor TR, Herring AC, Dorf ME, Kuziel WA, Toews GB, Huffnagle GB.

Related Articles, Links



Differential roles of CC chemokine ligand 2/monocyte chemotactic protein-1 and CCR2 in the development of T1 immunity.

J Immunol. 2002 May 1;168(9):4659-66.

PMID: 11971015 [PubMed - indexed for MEDLINE]

16: Zhu Z, Ma B, Zheng T, Homer RJ, Lee CG, Charo IF, Noble P, Elias JA. Related Articles, Links



IL-13-induced chemokine responses in the lung: role of CCR2 in the pathogenesis of IL-13-induced inflammation and remodeling. J Immunol. 2002 Mar 15;168(6):2953-62.

PMID: 11884467 [PubMed - indexed for MEDLINE]

17: Sarawar SR, Lee BJ, Anderson M, Teng YC, Zuberi R, Von Gesjen Related Articles, Links S.

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Chemokine induction and leukocyte trafficking to the lungs during murine gammaherpesvirus 68 (MHV-68) infection.

Virology. 2002 Feb 1;293(1):54-62.

PMID: 11853399 [PubMed - indexed for MEDLINE]

18: Martinelli R. Sabroe I, LaRosa G, Williams TJ, Pease JE.

Related Articles, Links



The CC chemokine eotaxin (CCL11) is a partial agonist of CC chemokine receptor 2b.

J Biol Chem. 2001 Nov 16;276(46):42957-64. Epub 2001 Sep 14.

PMID: 11559700 [PubMed - indexed for MEDLINE]

1 19: <u>Iikura M. Miyamasu M. Yamaguchi M. Kawasaki H. Matsushima</u> Related Articles, Links K. Kitaura M. Morita Y. Yoshie O. Yamamoto K. Hirai K.



Chemokine receptors in human basophils: inducible expression of functional CXCR4.

J Leukoc Biol. 2001 Jul;70(1):113-20.

PMID: 11435493 [PubMed - indexed for MEDLINE]

20: Chen X, Oppenheim J, Howard OM.

Related Articles, Links



Shikonin, a component of antiinflammatory Chinese herbal medicine, selectively blocks chemokine binding to CC chemokine receptor-1. Int Immunopharmacol. 2001 Feb;1(2):229-36.

PMID: 11360924 [PubMed - indexed for MEDLINE]

1 21: Ogilvie P. Bardi G. Clark-Lewis I. Baggiolini M, Uguccioni M. Rela

Related Articles, Links



Eotaxin is a natural antagonist for CCR2 and an agonist for CCR5.

Blood. 2001 Apr 1;97(7):1920-4.

PMID: 11264152 [PubMed - indexed for MEDLINE]

22: Sebastiani S. Allavena P. Albanesi C. Nasorri F. Bianchi G. Traidl Related Articles, Links C. Sozzani S. Girolomoni G. Cavani A.



Chemokine receptor expression and function in CD4+ T lymphocytes with regulatory activity.

J Immunol. 2001 Jan 15;166(2):996-1002.

PMID: 11145678 [PubMed - indexed for MEDLINE]

1 23: Heinemann A, Hartnell A, Stubbs VE, Murakami K, Soler D, LaRosa G, Askenase PW, Williams TJ, Sabroe I.

Related Articles, Links



Basophil responses to chemokines are regulated by both sequential and cooperative receptor signaling.

J Immunol. 2000 Dec 15;165(12):7224-33.

PMID: 11120855 [PubMed - indexed for MEDLINE]

1 24: Blease K, Mehrad B, Standiford TJ, Lukacs NW, Gosling J, Boring Related Articles, Links L, Charo IF, Kunkel SL, Hogaboam CM.



Enhanced pulmonary allergic responses to Aspergillus in CCR2-/- mice. J Immunol. 2000 Sep 1;165(5):2603-11.

PMID: 10946288 [PubMed - indexed for MEDLINE]

25: Schweickart VL, Epp A, Raport CJ, Grav PW.

Related Articles, Links



CCR11 is a functional receptor for the monocyte chemoattractant protein family of chemokines.

J Biol Chem. 2000 Mar 31;275(13):9550-6.

PMID: 10734104 [PubMed - indexed for MEDLINE]

26: Rajan AJ, Asensio VC, Campbell IL, Brosnan CF.

Related Articles, Links



Experimental autoimmune encephalomyelitis on the SJL mouse: effect of gamma delta T cell depletion on chemokine and chemokine receptor expression in the central nervous system.

J Immunol. 2000 Feb 15;164(4):2120-30.

PMID: 10657666 [PubMed - indexed for MEDLINE]

27: Banas B, Luckow B, Moller M, Klier C, Nelson PJ, Schadde E, Related Articles, Links Brigl M, Halevy D, Holthofer H, Reinhart B, Schlondorff D



Chemokine and chemokine receptor expression in a novel human mesangial cell line.

J Am Soc Nephrol. 1999 Nov;10(11):2314-22. PMID: 10541290 [PubMed - indexed for MEDLINE]

28: Campbell EM, Charo IF, Kunkel SL, Strieter RM, Boring L. Related Articles, Links Gosling J. Lukacs NW.

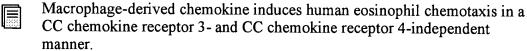


Monocyte chemoattractant protein-1 mediates cockroach allergen-induced bronchial hyperreactivity in normal but not CCR2-/- mice: the role of mast

J Immunol. 1999 Aug 15;163(4):2160-7.

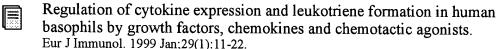
PMID: 10438957 [PubMed - indexed for MEDLINE]

1 29: Bochner BS, Bickel CA, Taylor ML, MacGlashan DW Jr, Gray Related Articles, Links PW, Raport CJ, Godiska R.



J Allergy Clin Immunol. 1999 Mar; 103(3 Pt 1):527-32. PMID: 10069890 [PubMed - indexed for MEDLINE]

30: Ochensberger B, Tassera L, Bifrare D, Rihs S, Dahinden CA. Related Articles, Links



PMID: 9933081 [PubMed - indexed for MEDLINE]

31: Bonecchi R. Polentarutti N. Luini W. Borsatti A. Bernasconi S. Related Articles, Links Locati M, Power C, Proudfoot A, Wells TN, Mackay C, Mantovani A. Sozzani S.



Up-regulation of CCR1 and CCR3 and induction of chemotaxis to CC chemokines by IFN-gamma in human neutrophils.

J Immunol. 1999 Jan 1;162(1):474-9. PMID: 9886422 [PubMed - indexed for MEDLINE]

1 32: Hogaboam CM, Gallinat CS, Bone-Larson C, Chensue SW, Lukacs Related Articles, Links NW, Strieter RM, Kunkel SL.



Collagen deposition in a non-fibrotic lung granuloma model after nitric oxide inhibition.

Am J Pathol. 1998 Dec;153(6):1861-72. PMID: 9846976 [PubMed - indexed for MEDLINE]

33: Albini A, Ferrini S, Benelli R, Sforzini S, Giunciuglio D, Aluigi MG, Proudfoot AE, Alouani S, Wells TN, Mariani G, Rabin RL, Farber JM, Noonan DM.

Related Articles, Links



HIV-1 Tat protein mimicry of chemokines. Proc Natl Acad Sci U S A. 1998 Oct 27;95(22):13153-8.

PMID: 9789057 [PubMed - indexed for MEDLINE]

34: Crump MP, Rajarathnam K, Kim KS, Clark-Lewis I, Sykes BD. Related Articles, Links



Solution structure of eotaxin, a chemokine that selectively recruits eosinophils in allergic inflammation.

J Biol Chem. 1998 Aug 28;273(35):22471-9.

PMID: 9712872 [PubMed - indexed for MEDLINE]

Hadida F, Vieillard V, Autran B, Clark-Lewis I, Baggiolini M, Related Articles, Links 35: Debre P.



HIV-specific T cell cytotoxicity mediated by RANTES via the chemokine receptor CCR3.

J Exp Med. 1998 Aug 3;188(3):609-14.

PMID: 9687538 [PubMed - indexed for MEDLINE]

1 36: Uguccioni M, Mackay CR, Ochensberger B, Loetscher P, Rhis S, LaRosa GJ, Rao P, Ponath PD, Baggiolini M, Dahinden CA.



High expression of the chemokine receptor CCR3 in human blood basophils. Role in activation by eotaxin, MCP-4, and other chemokines. J Clin Invest. 1997 Sep 1;100(5):1137-43.

PMID: 9276730 [PubMed - indexed for MEDLINE]

1737: Ayehunie S. Garcia-Zepeda EA, Hoxie JA, Horuk R, Kupper TS, Luster AD, Ruprecht RM



Human immunodeficiency virus-1 entry into purified blood dendritic cells through CC and CXC chemokine coreceptors.

Blood. 1997 Aug 15;90(4):1379-86.

PMID: 9269754 [PubMed - indexed for MEDLINE]

38: Sozzani S, Luini W, Borsatti A, Polentarutti N, Zhou D, Piemonti L, D'Arnico G, Power CA, Wells TN, Gobbi M, Allavena P, Mantovani A.



Receptor expression and responsiveness of human dendritic cells to a defined set of CC and CXC chemokines.

J Immunol. 1997 Aug 15;159(4):1993-2000. PMID: 9257866 [PubMed - indexed for MEDLINE]

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Consumer Health Clinical Alerts	4: Pope SM, Fulkerson PC, Blanchard C, Saito Akei H, Nikolaidis NM, Related Articles, Links Zimmermann N, Molkentin JD, Rothenberg ME
Clinica⊞rials.gov PubMed Central	Identification of a cooperative mechanism involving IL-13 and eotaxin-2 in experimental allergic lung inflammation. J Biol Chem. 2005 Jan 12; [Epub ahead of print] PMID: 15647285 [PubMed - as supplied by publisher]
	5: Southam DS, Widmer N, Ellis R, Hirota JA, Inman MD, Schmi R. Related Articles, Links
	Increased eosinophil-lineage committed progenitors in the lung of allergenchallenged mice. J Allergy Clin Immunol. 2005 Jan;115(1):95-102. PMID: 15637553 [PubMed - in process]
	6: Salvadori C, Peters IR, Day MJ, Engvall E, Shelton GD. Related Articles, Links
	Muscle regeneration, inflammation, and connective tissue expansion in canine inflammatory myopathy. Muscle Nerve. 2004 Dec 22; [Epub ahead of print] PMID: 15617078 [PubMed - as supplied by publisher]

eosinophils and bronchial epithelial cells. Clin Exp Immunol. 2005 Jan;139(1):90-100.

PMID: 15606618 [PubMed - in process]

7: Wong CK, Wang CB, Ip WK, Tian YP, Lam CW.

8: Chung KF, Adcock IM.

Related Articles, Links

Related Articles, Links

Role of p38 MAPK and NF-kB for chemokine release in coculture of human

Combination therapy of long-acting beta2-adrenoceptor agonists and corticosteroids for asthma. Treat Respir Med. 2004;3(5):279-89. Review. PMID: 15606218 [PubMed - indexed for MEDLINE] 9: Hebenstreit D, Luft P, Schmiedlechner A, Duschl A, Horejs-Hoeck J. Related Articles, Links SOCS-1 and SOCS-3 inhibit IL-4 and IL-13 induced activation of Eotaxin-3/CCL26 gene expression in HEK293 cells. Mol Immunol. 2005 Feb;42(3):295-303. PMID: 15589317 [PubMed - in process] 10: Solomon MF, Kuziel WA, Simeonovic CJ. Related Articles, Links The contribution of chemokines and chemokine receptors to the rejection of fetal proislet allografts. Cell Transplant. 2004;13(5):503-14. PMID: 15565863 [PubMed - in process] 11: Eum SY, Maghni K, Tolloczko B, Eidelman DH, Martin JG. Related Articles, Links IL-13 may mediate allergen-induced hyperresponsiveness independently of IL-5 or eotaxin by effects on airway smooth muscle. Am J Physiol Lung Cell Mol Physiol. 2005 Mar;288(3):L576-84. Epub 2004 Nov 24. PMID: 15563687 [PubMed - in process] 12: Hessner MJ, Wang X, Meyer L, Geoffrey R, Jia S, Fuller J, Related Articles, Links Lernmark A, Ghosh S Involvement of eotaxin, eosinophils, and pancreatic predisposition in development of type 1 diabetes mellitus in the BioBreeding rat. J Immunol. 2004 Dec 1;173(11):6993-7002. PMID: 15557196 [PubMed - indexed for MEDLINE] 13: Luo F, Liu X, Li S, Liu C, Wang Z. Related Articles, Links Melatonin promoted chemotaxins expression in lung epithelial cell stimulated with TNF-alpha. Respir Res. 2004 Nov 10;5(1):20. PMID: 15537425 [PubMed - in process] 14: Hartnell A, Heinemann A, Conroy DM, Wait R, Sturm GJ, Related Articles, Links Caversaccio M, Jose PJ, Williams TJ Identification of selective basophil chemoattractants in human nasal polyps as insulin-like growth factor-1 and insulin-like growth factor-2. J Immunol. 2004 Nov 15;173(10):6448-57. PMID: 15528386 [PubMed - indexed for MEDLINE] 15: Johnston RA, Schwartzman IN, Flynt L, Shore SA Related Articles, Links Role of interleukin-6 in murine airway responses to ozone. Am J Physiol Lung Cell Mol Physiol. 2005 Feb;288(2):L390-7. Epub 2004 Oct 29. PMID: 15516495 [PubMed - in process] 16: Desmet C, Gosset P, Pajak B, Cataldo D, Bentires-Alj M, Lekeux Related Articles, Links P. Bureau F. Selective blockade of NF-kappa B activity in airway immune cells inhibits the effector phase of experimental asthma. J Immunol. 2004 Nov 1;173(9):5766-75. PMID: 15494529 [PubMed - indexed for MEDLINE] 17: Silverman ES, Breault DT, Vallone J, Subramanian S, Yilmaz AD, Related Articles, Links Mathew S, Subramaniam V, Tantisira K, Pacak K, Weiss ST, Majzoub JA.

h

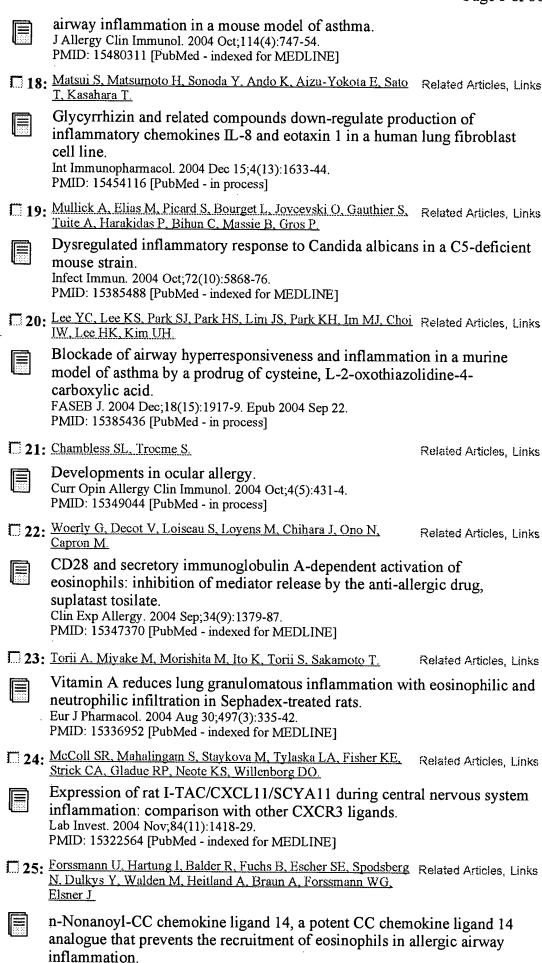
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J Immunol. 2004 Sep 1;173(5):3456-66.

PMID: 15322211 [PubMed - indexed for MEDLINE] 26: Perng DW, Huang HY, Chen HM, Lee YC, Perng RP. Related Articles, Links Characteristics of airway inflammation and bronchodilator reversibility in COPD: a potential guide to treatment. Chest. 2004 Aug; 126(2):375-81. PMID: 15302720 [PubMed - indexed for MEDLINE] 27: Qiu Z, Fujimura M, Kurashima K, Nakao S, Mukaida N. Related Articles, Links Enhanced airway inflammation and decreased subepithelial fibrosis in interleukin 6-deficient mice following chronic exposure to aerosolized Clin Exp Allergy. 2004 Aug;34(8):1321-8. PMID: 15298576 [PubMed - indexed for MEDLINE] 28: Menzies-Gow A. Ying S. Phipps S. Kay AB. Related Articles, Links Interactions between eotaxin, histamine and mast cells in early microvascular events associated with eosinophil recruitment to the site of allergic skin reactions in humans. Clin Exp Allergy. 2004 Aug;34(8):1276-82. PMID: 15298570 [PubMed - indexed for MEDLINE] 1 29: Heller NM, Matsukura S, Georas SN, Boothby MR, Rothman PB. Related Articles, Links Stellato C, Schleimer RP. Interferon-gamma inhibits STAT6 signal transduction and gene expression in human airway epithelial cells. Am J Respir Cell Mol Biol. 2004 Nov;31(5):573-82. Epub 2004 Aug 05. PMID: 15297269 [PubMed - indexed for MEDLINE] 30: Gounni AS, Hamid Q, Rahman SM, Hoeck J, Yang J, Shan L. Related Articles, Links IL-9-mediated induction of eotaxin1/CCL11 in human airway smooth muscle cells. J Immunol. 2004 Aug 15;173(4):2771-9. PMID: 15294996 [PubMed - indexed for MEDLINE] 31: Samoszuk M. Deng T, Hamamura MJ, Su MY, Asbrock N, Related Articles, Links Nalcioglu O. Increased blood clotting, microvascular density, and inflammation in eotaxin-secreting tumors implanted into mice. Am J Pathol. 2004 Aug; 165(2):449-56. PMID: 15277219 [PubMed - indexed for MEDLINE] 32: Chuang YH, Fu CL, Lo YC, Chiang BL. Related Articles, Links Adenovirus expressing Fas ligand gene decreases airway hyperresponsiveness and eosinophilia in a murine model of asthma. Gene Ther. 2004 Oct;11(20):1497-505. PMID: 15269717 [PubMed - indexed for MEDLINE] 133: Macedo-Soares MF, Itami DM, Lima C, Perini A, Faquim-Mauro Related Articles, Links EL, Martins MA, Macedo MS Lung eosinophilic inflammation and airway hyperreactivity are enhanced by murine anaphylactic, but not nonanaphylactic, IgG1 antibodies. J Allergy Clin Immunol. 2004 Jul;114(1):97-104. PMID: 15241350 [PubMed - indexed for MEDLINE] 1 34: Yamamoto S, Kobayashi I, Tsuji K, Nishi N, Muro E, Miyazaki M, Related Articles, Links

Upregulation of interleukin-4 receptor by interferon-gamma: enhanced interleukin-4-induced eotaxin-3 production in airway epithelium.

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Zaitsu M. Inada S. Ichimaru T. Hamasaki Y.

Am J Respir Cell Mol Biol. 2004 Oct;31(4):456-62. Epub 2004 Jul 01. PMID: 15231490 [PubMed - indexed for MEDLINE] 35: Jahnz-Rozyk K, Brydak LB, Targowski T, Machala M, Plusa T. Related Articles, Links Effect of influenza vaccinations on immune response and serum eotaxin level in patients with allergic bronchial asthma. Mediators Inflamm. 2004 Jun;13(3):195-9. PMID: 15223611 [PubMed - in process] 36: De Smedt A, Vanderlinden E, Demanet C, De Waele M, Goossens Related Articles, Links A, Noppen M. Characterisation of pleural inflammation occurring after primary spontaneous pneumothorax. Eur Respir J. 2004 Jun;23(6):896-900. PMID: 15219004 [PubMed - indexed for MEDLINE] 7: Thomas MS, Kunkel SL, Lukacs NW. Related Articles, Links Regulation of cockroach antigen-induced allergic airway hyperreactivity by the CXCR3 ligand CXCL9. J Immunol. 2004 Jul 1;173(1):615-23. PMID: 15210824 [PubMed - indexed for MEDLINE] 38: Parody TR, Stone MJ Related Articles, Links High level expression, activation, and antagonism of CC chemokine receptors CCR2 and CCR3 in Chinese hamster ovary cells. Cytokine. 2004 Jul 7;27(1):38-46. PMID: 15207250 [PubMed - indexed for MEDLINE] 39: Sanbongi C, Takano H, Osakabe N, Sasa N, Natsume M, Related Articles, Links Yanagisawa R, Inoue KI, Sadakane K, Ichinose T, Yoshikawa T. Rosmarinic acid in perilla extract inhibits allergic inflammation induced by mite allergen, in a mouse model. Clin Exp Allergy. 2004 Jun;34(6):971-7. PMID: 15196288 [PubMed - indexed for MEDLINE] 40: Miyake M, Morishita M, Ito K, Ito A, Torii S, Sakamoto T. Related Articles, Links Production of granulomatous inflammation in lungs of rat pups and adults by Sephadex beads. Pediatr Res. 2004 Aug; 56(2): 205-11. Epub 2004 Jun 04. PMID: 15181185 [PubMed - in process] 41: Duan W, Chan JH, Wong CH, Leung BP, Wong WS Related Articles, Links Anti-inflammatory effects of mitogen-activated protein kinase kinase inhibitor U0126 in an asthma mouse model. J Immunol. 2004 Jun 1;172(11):7053-9. PMID: 15153527 [PubMed - indexed for MEDLINE] 1 42: Ogilvie P, Thelen S, Moepps B, Gierschik P, da Silva Campos AC, Related Articles, Links Baggiolini M, Thelen M. Unusual chemokine receptor antagonism involving a mitogen-activated protein kinase pathway. J Immunol. 2004 Jun 1;172(11):6715-22. PMID: 15153488 [PubMed - indexed for MEDLINE] 43: Shakoory B, Fitzgerald SM, Lee SA, Chi DS, Krishnaswamy G. Related Articles, Links The role of human mast cell-derived cytokines in eosinophil biology. J Interferon Cytokine Res. 2004 May;24(5):271-81. Review. PMID: 15153310 [PubMed - indexed for MEDLINE]

44: Mandal AK, Zhang Z, Ray R, Choi MS, Chowdhury B, Related Articles, Links Pattabiraman N. Mukherjee AB. Uteroglobin represses allergen-induced inflammatory response by blocking PGD2 receptor-mediated functions. J Exp Med. 2004 May 17;199(10):1317-30. PMID: 15148333 [PubMed - indexed for MEDLINE] 45: Nonaka M, Pawankar R, Fukumoto A, Ogihara N, Sakanushi A, Related Articles, Links Yagi T. Induction of eotaxin production by interleukin-4, interleukin-13 and lipopolysaccharide by nasal fibroblasts. Clin Exp Allergy. 2004 May;34(5):804-11. PMID: 15144475 [PubMed - indexed for MEDLINE] 46: Leung TF, Wong GW, Ko FW, Lam CW, Fok TF. Related Articles, Links Increased macrophage-derived chemokine in exhaled breath condensate and plasma from children with asthma. Clin Exp Allergy. 2004 May;34(5):786-91. PMID: 15144472 [PubMed - indexed for MEDLINE] 47: Liu RL, Liu ZL, Li Q, Qiu ZM, Lu HJ, Yang ZM, Hong GC Related Articles, Links [The experimental study on the inhibitory effect of tripterine on airway inflammation in asthmatic micel Zhonghua Jie He He Hu Xi Za Zhi. 2004 Mar;27(3):165-8. Chinese. PMID: 15130326 [PubMed - indexed for MEDLINE] 48: Kradin RL, Sakamoto H, Jain F, Zhao LH, Hymowitz G, Preffer F. Related Articles, Links IL-10 inhibits inflammation but does not affect fibrosis in the pulmonary response to bleomycin. Exp Mol Pathol. 2004 Jun;76(3):205-11. PMID: 15126102 [PubMed - indexed for MEDLINE] 49: Sampaio AL, Rae GA, Henriques MG. Related Articles, Links Effects of endothelin ETA receptor antagonism on granulocyte and lymphocyte accumulation in LPS-induced inflammation. J Leukoc Biol. 2004 Jul;76(1):210-6. Epub 2004 Apr 23. PMID: 15107459 [PubMed - indexed for MEDLINE] 50: Mejias A, Chavez-Bueno S, Rios AM, Saavedra-Lozano J, Fonseca Related Articles, Links Aten M, Hatfield J, Kapur P, Gomez AM, Jafri HS, Ramilo O. Anti-respiratory syncytial virus (RSV) neutralizing antibody decreases lung inflammation, airway obstruction, and airway hyperresponsiveness in a murine RSV model. Antimicrob Agents Chemother. 2004 May;48(5):1811-22. PMID: 15105140 [PubMed - indexed for MEDLINE] 51: Forbes E, Murase T, Yang M, Matthaei KI, Lee JJ, Lee NA, Foster Related Articles, Links PS, Hogan SP. Immunopathogenesis of experimental ulcerative colitis is mediated by eosinophil peroxidase. J Immunol. 2004 May 1;172(9):5664-75. PMID: 15100311 [PubMed - indexed for MEDLINE] 52: Corry DB, Kiss A, Song LZ, Song L, Xu J, Lee SH, Werb Z, Related Articles, Links Kheradmand F. Overlapping and independent contributions of MMP2 and MMP9 to lung allergic inflammatory cell egression through decreased CC chemokines. FASEB J. 2004 Jun; 18(9): 995-7. Epub 2004 Apr 01. PMID: 15059974 [PubMed - indexed for MEDLINE]

53: Petkovic V, Moghini C, Paoletti S, Uguccioni M, Gerber B. Related Articles, Links Eotaxin-3/CCL26 is a natural antagonist for CC chemokine receptors 1 and 5. A human chemokine with a regulatory role. J Biol Chem. 2004 May 28;279(22):23357-63. Epub 2004 Mar 23. PMID: 15039444 [PubMed - indexed for MEDLINE] 54: Wohlleben G. Trujillo C, Muller J, Ritze Y, Grunewald S. Tatsch Related Articles, Links U, Erb KJ. Helminth infection modulates the development of allergen-induced airway inflammation. Int Immunol. 2004 Apr;16(4):585-96. PMID: 15039389 [PubMed - indexed for MEDLINE] 55: Jaffar Z, Sivakuru T, Roberts K. Related Articles, Links CD4+CD25+ T cells regulate airway eosinophilic inflammation by modulating the Th2 cell phenotype. J Immunol. 2004 Mar 15;172(6):3842-9. PMID: 15004191 [PubMed - indexed for MEDLINE] 56: Almolki A, Taille C, Martin GF, Jose PJ, Zedda C. Conti M, Related Articles, Links Megret J. Henin D, Aubier M, Boczkowski J. Heme oxygenase attenuates allergen-induced airway inflammation and hyperreactivity in guinea pigs. Am J Physiol Lung Cell Mol Physiol. 2004 Jul;287(1):L26-34. Epub 2004 Mar 05. PMID: 15003924 [PubMed - indexed for MEDLINE] 57: Dent G, Hadjicharalambous C, Yoshikawa T, Handy RL, Powell J. Related Articles, Links Anderson IK, Louis R, Davies DE, Djukanovic R. Contribution of eotaxin-1 to eosinophil chemotactic activity of moderate and severe asthmatic sputum. Am J Respir Crit Care Med. 2004 May 15;169(10):1110-7. Epub 2004 Mar 04. PMID: 15001461 [PubMed - indexed for MEDLINE] 58: Takano H, Osakabe N, Sanbongi C, Yanagisawa R, Inoue K, Related Articles, Links Yasuda A, Natsume M, Baba S, Ichiishi E, Yoshikawa T. Extract of Perilla frutescens enriched for rosmarinic acid, a polyphenolic phytochemical, inhibits seasonal allergic rhinoconjunctivitis in humans. Exp Biol Med (Maywood). 2004 Mar;229(3):247-54. PMID: 14988517 [PubMed - indexed for MEDLINE] 59: Fulkerson PC, Zimmermann N, Brandt EB, Muntel EE, Doepker Related Articles, Links MP, Kavanaugh JL, Mishra A. Witte DP, Zhang H, Farber JM, Yang M, Foster PS, Rothenberg ME. Negative regulation of eosinophil recruitment to the lung by the chemokine monokine induced by IFN-gamma (Mig. CXCL9). Proc Natl Acad Sci U S A. 2004 Feb 17;101(7):1987-92. Epub 2004 Feb 09. PMID: 14769916 [PubMed - indexed for MEDLINE] 60: Beck-Schimmer B, Romero B, Booy C, Joch H, Hallers U, Pasch T, Related Articles, Links Spahn DR. Release of inflammatory mediators in irradiated cell salvage blood and their biological consequences in human beings following transfusion. Eur J Anaesthesiol. 2004 Jan;21(1):46-52. PMID: 14768923 [PubMed - indexed for MEDLINE] 61: Bilenki L, Yang J, Fan Y, Wang S, Yang X. Related Articles, Links Natural killer T cells contribute to airway eosinophilic inflammation induced by ragweed through enhanced IL-4 and eotaxin production. Eur J Immunol. 2004 Feb;34(2):345-54.

PMID: 14768039 [PubMed - indexed for MEDLINE]

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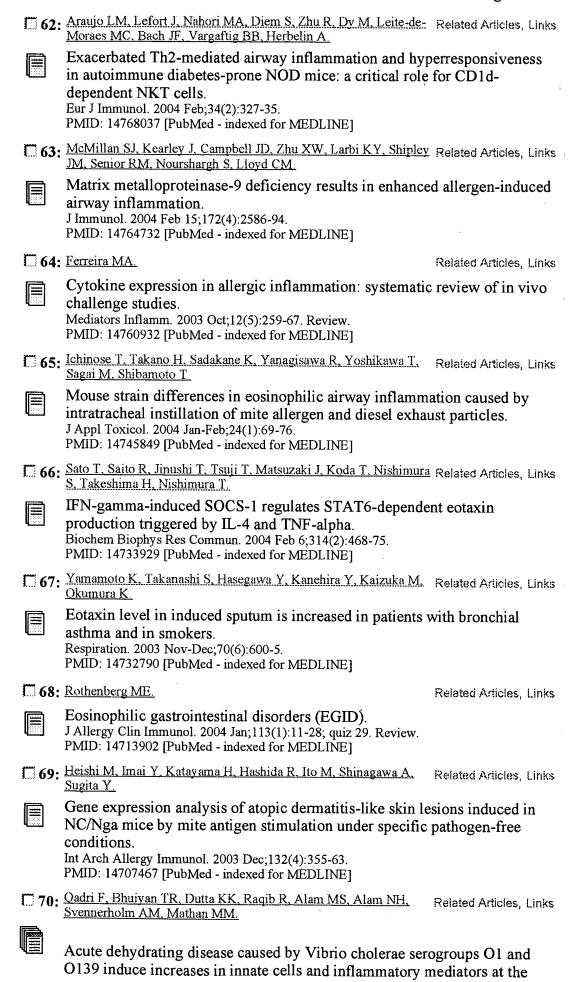
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Related Articles, Links

mucosal surface of the gut. Gut. 2004 Jan;53(1):62-9. PMID: 14684578 [PubMed - indexed for MEDLINE] 71: Peng Q. Matsuda T, Hirst SJ. Related Articles, Links Signaling pathways regulating interleukin-13-stimulated chemokine release from airway smooth muscle. Am J Respir Crit Care Med. 2004 Mar 1;169(5):596-603. Epub 2003 Dec 11. PMID: 14670803 [PubMed - indexed for MEDLINE] 72: Takamura K, Nasuhara Y, Kobayashi M, Betsuyaku T, Tanino Y, Related Articles, Links Kinoshita I, Yamaguchi E, Matsukura S, Schleimer RP, Nishimura Retinoic acid inhibits interleukin-4-induced eotaxin production in a human = bronchial epithelial cell line. Am J Physiol Lung Cell Mol Physiol. 2004 Apr;286(4):L777-85. Epub 2003 Dec 05. PMID: 14660485 [PubMed - indexed for MEDLINE] 73: Erpenbeck VJ, Hagenberg A, Dulkys Y, Elsner J, Balder R, Krentel Related Articles, Links H. Discher M. Braun A. Krug N, Hohlfeld JM. Natural porcine surfactant augments airway inflammation after allergen challenge in patients with asthma. Am J Respir Crit Care Med. 2004 Mar 1;169(5):578-86. Epub 2003 Nov 25. PMID: 14644929 [PubMed - indexed for MEDLINE] 74. Machida I, Matsuse H, Kondo Y, Kawano T, Saeki S, Tomari S, Related Articles, Links Fukushima C, Shimoda T, Kohno S. Acetaldehyde induces granulocyte macrophage colony-stimulating factor production in human bronchi through activation of nuclear factor-kappa B. Allergy Asthma Proc. 2003 Sep-Oct;24(5):367-71. PMID: 14619338 [PubMed - indexed for MEDLINE] 75: Pods R, Ross D, van Hulst S, Rudack C, Maune S. Related Articles, Links RANTES, eotaxin and eotaxin-2 expression and production in patients with aspirin triad. Allergy. 2003 Nov;58(11):1165-70. PMID: 14616128 [PubMed - indexed for MEDLINE] 76: Kim BH, Lee YS, Kang KS Related Articles, Links The mechanism of retinol-induced irritation and its application to antiirritant development. Toxicol Lett. 2003 Dec 15;146(1):65-73. PMID: 14615068 [PubMed - indexed for MEDLINE] 77: Neff SB, Neff TA, Kunkel SL, Hogaboam CM. Related Articles, Links Alterations in cytokine/chemokine expression during organ-to-organ communication established via acetaminophen-induced toxicity. Exp Mol Pathol. 2003 Dec;75(3):187-93. PMID: 14611809 [PubMed - indexed for MEDLINE] 78: Chvatchko Y, Proudfoot AE, Buser R, Juillard P, Alouani S, Related Articles, Links Kosco-Vilbois M. Covle AJ, Nibbs RJ, Graham G, Offord RE, Inhibition of airway inflammation by amino-terminally modified RANTES/CC chemokine ligand 5 analogues is not mediated through J Immunol. 2003 Nov 15;171(10):5498-506.

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PMID: 14607956 [PubMed - indexed for MEDLINE]

Panzner P, Lafitte JJ, Tsicopoulos A, Hamid Q, Tulic MK.

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79: Marked up-regulation of T lymphocytes and expression of interleukin-9 in bronchial biopsies from patients With chronic bronchitis with obstruction. Chest. 2003 Nov; 124(5): 1909-15. PMID: 14605067 [PubMed - indexed for MEDLINE] 80: Mishra A. Rothenberg ME. Related Articles, Links Intratracheal IL-13 induces eosinophilic esophagitis by an IL-5, eotaxin-1, and STAT6-dependent mechanism. Gastroenterology. 2003 Nov;125(5):1419-27. PMID: 14598258 [PubMed - indexed for MEDLINE] 81: Amerio P, Frezzolini A, Feliciani C, Verdolini R, Teofoli P, De Pita Related Articles, Links O, Puddu P. Eotaxins and CCR3 receptor in inflammatory and allergic skin diseases: therapeutical implications. Curr Drug Targets Inflamm Allergy. 2003 Mar;2(1):81-94. Review. PMID: 14561178 [PubMed - indexed for MEDLINE] 82: Mattes J, Foster PS. Related Articles, Links Regulation of eosinophil migration and Th2 cell function by IL-5 and Curr Drug Targets Inflamm Allergy. 2003 Jun;2(2):169-74. Review. PMID: 14561170 [PubMed - indexed for MEDLINE] 83: Myou S, Zhu X, Myo S, Boetticher E, Meliton AY, Liu J, Munoz Related Articles, Links NM, Leff AR. Blockade of airway inflammation and hyperresponsiveness by HIV-TATdominant negative Ras. J Immunol. 2003 Oct 15;171(8):4379-84. PMID: 14530363 [PubMed - indexed for MEDLINE] 84: Matsukura M, Yajima A, Yamazaki F, Yudate T, Yamada H, Related Articles, Links Tezuka T. Epinastine inhibits eosinophil chemotaxis and adhesion molecules in atopic dermatitis. Skin Pharmacol Appl Skin Physiol. 2003 Nov-Dec;16(6):405-10. PMID: 14528065 [PubMed - indexed for MEDLINE] 85: Bonini S. Lambiase A. Sgrulletta R. Bonini S. Related Articles, Links Allergic chronic inflammation of the ocular surface in vernal keratoconjunctivitis. Curr Opin Allergy Clin Immunol. 2003 Oct;3(5):381-7. Review. PMID: 14501439 [PubMed - indexed for MEDLINE] 86: Yu CK, Chen CL. Related Articles, Links Activation of mast cells is essential for development of house dust mite Dermatophagoides farinae-induced allergic airway inflammation in mice. J Immunol. 2003 Oct 1;171(7):3808-15. PMID: 14500682 [PubMed - indexed for MEDLINE] 87: Message SD, Johnston SL. Related Articles, Links Host defense function of the airway epithelium in health and disease: clinical background. J Leukoc Biol. 2004 Jan;75(1):5-17. Epub 2003 Sep 12. Review. PMID: 12972516 [PubMed - indexed for MEDLINE] 88: Conroy DM, Jopling LA, Lloyd CM, Hodge MR, Andrew DP, Related Articles, Links Williams TJ, Pease JE, Sabroe I.

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	CCR4 blockade does not inhibit allergic airways inflam J Leukoc Biol. 2003 Oct;74(4):558-63. Epub 2003 Jul 15. PMID: 12960268 [PubMed - indexed for MEDLINE]	mation.
□ 89	Bommel H, Haake M, Luft P, Horejs-Hoeck J, Hein H, Bartels J, Schauer C, Poschl U, Kracht M, Duschl A.	Related Articles, Links
	The diesel exhaust component pyrene induces expression eotaxin. Int Immunopharmacol. 2003 Oct;3(10-11):1371-9. PMID: 12946434 [PubMed - indexed for MEDLINE]	on of IL-8 but not of
□ 90	Park SW, Kim do J, Chang HS, Park SJ, Lee YM, Park JS, Chung IY, Lee JH, Park CS.	Related Articles, Links
	Association of interleukin-5 and eotaxin with acute exact Int Arch Allergy Immunol. 2003 Aug;131(4):283-90. PMID: 12915771 [PubMed - indexed for MEDLINE]	cerbation of asthma.
□91	Leung TF, Ma KC, Hon KL, Lam CW, Wan H, Li CY, Chan IH	Related Articles, Links
	Serum concentration of macrophage-derived chemokine inflammatory marker for assessing severity of atopic detand young children. Pediatr Allergy Immunol. 2003 Aug;14(4):296-301. PMID: 12911508 [PubMed - indexed for MEDLINE]	may be a useful rmatitis in infants
□ 92	Gordon JR, Swystun VA, Li F, Zhang X, Davis BE, Hull P, Cockcroft DW	Related Articles, Links
	Regular salbutamol use increases CXCL8 responses in a to the eosinophil response. Eur Respir J. 2003 Jul;22(1):118-26. PMID: 12882461 [PubMed - indexed for MEDLINE]	sthma: relationship
□ 93	Sabatini F, Silvestri M, Sale R, Serpero L, Giuliani M, Scarso L, Favini P, Rossi GA	Related Articles, Links
	Concentration-dependent effects of mometasone furoate dexamethasone on foetal lung fibroblast functions involvinflammation and remodeling. Pulm Pharmacol Ther. 2003;16(5):287-97. PMID: 12877820 [PubMed - indexed for MEDLINE]	and ved in airway
□ 94:	Sehmi R, Dorman S, Baatjes A, Watson R, Foley R, Ying S, Robinson DS, Kay AB, O'Byrne PM, Denburg JA.	Related Articles, Links
	Allergen-induced fluctuation in CC chemokine receptor bone marrow CD34+ cells from asthmatic subjects: sign mobilization of haemopoietic progenitor cells in allergic Immunology. 2003 Aug;109(4):536-46. PMID: 12871220 [PubMed - indexed for MEDLINE]	ificance for
□ 95:	Iwasaki M, Saito K, Takemura M, Sekikawa K, Fujii H, Yamada Y, Wada H, Mizuta K, Seishima M, Ito Y	Related Articles, Links
	TNF-alpha contributes to the development of allergic rhi J Allergy Clin Immunol. 2003 Jul;112(1):134-40. PMID: 12847490 [PubMed - indexed for MEDLINE]	nitis in mice.
□ 96:	Hauber HP, Gotfried M, Newman K, Danda R, Servi RJ, Christodoulopoulos P, Hamid Q.	Related Articles, Links
	Effect of HFA-flunisolide on peripheral lung inflammati J Allergy Clin Immunol. 2003 Jul;112(1):58-63. PMID: 12847480 [PubMed - indexed for MEDLINE]	on in asthma.
□ 97:	Fukuno Y, Hayashi S, Kohsa K, Fujisawa N, Tominaga M, Miller EJ, Nagasawa K.	Related Articles, Links

Chemokine receptor inhibitor, Antileukinate, suppressed ovalbumin-induced eosinophilic inflammation in the airway. Cytokine. 2003 Jun 7;22(5):116-25. PMID: 12842759 [PubMed - indexed for MEDLINE] 1 98: Helwig U. Gionchetti P. Rizzello F, Lammers K, Kuhbacher T, Related Articles, Links Schreiber S, Baggiolini M, Uguccioni M, Campieri M. CXC and CC chemokine expression in inflamed and noninflamed pelvic ileal pouch tissue. Int J Colorectal Dis. 2004 Mar;19(2):165-70. Epub 2003 Jun 25. PMID: 12827410 [PubMed - indexed for MEDLINE] 99. Sannohe S, Adachi T, Hamada K, Honda K, Yamada Y, Saito N, Related Articles, Links Cui CH, Kavaba H, Ishikawa K, Chihara J. Upregulated response to chemokines in oxidative metabolism of eosinophils in asthma and allergic rhinitis. Eur Respir J. 2003 Jun;21(6):925-31. PMID: 12797483 [PubMed - indexed for MEDLINE] 100: Irkec M. Bozkurt B. Related Articles, Links Epithelial cells in ocular allergy. Curr Allergy Asthma Rep. 2003 Jul;3(4):352-7. Review. PMID: 12791215 [PubMed - indexed for MEDLINE] ☐ 101: Badewa AP, Heiman AS. Related Articles, Links Inhibition of CCL11, CCL24, and CCL26-induced degranulation in HL-60 eosinophilic cells by specific inhibitors of MEK1/MEK2, p38 MAP kinase, and PI 3-kinase. Immunopharmacol Immunotoxicol. 2003 May;25(2):145-57. PMID: 12784909 [PubMed - indexed for MEDLINE] 102: Wiley RE, Goncharova S, Shea T, Johnson JR, Coyle AJ, Jordana Related Articles, Links M. Evaluation of inducible costimulator/B7-related protein-1 as a therapeutic target in a murine model of allergic airway inflammation. Am J Respir Cell Mol Biol. 2003 Jun;28(6):722-30. PMID: 12760969 [PubMed - indexed for MEDLINE] 103: Liu L, Hakansson L, Ridefelt P, Garcia RC, Venge P. Related Articles, Links Priming of eosinophil migration across lung epithelial cell monolayers and upregulation of CD11b/CD18 are elicited by extracellular Ca2+. Am J Respir Cell Mol Biol. 2003 Jun;28(6):713-21. PMID: 12760968 [PubMed - indexed for MEDLINE] 104: Gregory B, Kirchem A, Phipps S, Gevaert P, Pridgeon C, Rankin Related Articles, Links SM, Robinson DS. Differential regulation of human eosinophil IL-3, IL-5, and GM-CSF receptor alpha-chain expression by cytokines: IL-3, IL-5, and GM-CSF down-regulate IL-5 receptor alpha expression with loss of IL-5 responsiveness, but up-regulate IL-3 receptor alpha expression. J Immunol. 2003 Jun 1;170(11):5359-66. PMID: 12759409 [PubMed - indexed for MEDLINE] 105: Braunstahl GJ, Fokkens WJ, Overbeek SE, KleinJan A, Related Articles, Links Hoogsteden HC, Prins JB. Mucosal and systemic inflammatory changes in allergic rhinitis and asthma: a comparison between upper and lower airways. Clin Exp Allergy. 2003 May;33(5):579-87. PMID: 12752585 [PubMed - indexed for MEDLINE]

106: Woerly G. Loiseau S. Loyens M. Schoch C. Capron M. Related Articles, Links Inhibitory effects of ketotifen on eotaxin-dependent activation of eosinophils: consequences for allergic eye diseases. Allergy. 2003 May;58(5):397-406. PMID: 12752326 [PubMed - indexed for MEDLINE] 107: Eum SY, Maghni K, Hamid Q, Eidelman DH, Campbell H, Isogai Related Articles, Links S. Martin JG. Inhibition of allergic airways inflammation and airway hyperresponsiveness in mice by dexamethasone: role of eosinophils, IL-5, eotaxin, and IL-13. J Allergy Clin Immunol. 2003 May; 111(5):1049-61. PMID: 12743570 [PubMed - indexed for MEDLINE] 108: Culley FJ, Fadlon EJ, Kirchem A, Williams TJ, Jose PJ, Pease JE. Related Articles, Links Proteoglycans are potent modulators of the biological responses of eosinophils to chemokines. Eur J Immunol. 2003 May;33(5):1302-10. PMID: 12731055 [PubMed - indexed for MEDLINE] 109: Holub A, Byrnes J, Anderson S, Dzaidzio L, Hogg N. Related Articles, Links Huttenlocher A. Ligand density modulates eosinophil signaling and migration. J Leukoc Biol. 2003 May;73(5):657-64. PMID: 12714581 [PubMed - indexed for MEDLINE] 110: Heinemann A, Schuligoi R, Sabroe I, Hartnell A, Peskar BA. Related Articles, Links Delta 12-prostaglandin J2, a plasma metabolite of prostaglandin D2, causes eosinophil mobilization from the bone marrow and primes eosinophils for chemotaxis. J Immunol. 2003 May 1;170(9):4752-8. PMID: 12707356 [PubMed - indexed for MEDLINE] 111: Olsson S, Cagnoni F, Dignetti P, Melioli G, Canonica GW. Related Articles, Links Low concentrations of cytokines produced by allergen-stimulated peripheral blood mononuclear cells have potent effects on nasal polypderived fibroblasts. Clin Exp Immunol. 2003 May;132(2):254-60. PMID: 12699413 [PubMed - indexed for MEDLINE] 112: Ogilvie P, Paoletti S, Clark-Lewis I, Uguccioni M. Related Articles, Links Eotaxin-3 is a natural antagonist for CCR2 and exerts a repulsive effect on human monocytes. Blood. 2003 Aug 1;102(3):789-94. Epub 2003 Apr 10. PMID: 12689946 [PubMed - indexed for MEDLÎNE] 113: Matsuse H, Kong X, Hu J, Wolf SF, Lockey RF, Mohapatra SS. Related Articles, Links Intranasal IL-12 produces discreet pulmonary and systemic effects on allergic inflammation and airway reactivity. Int Immunopharmacol. 2003 Apr;3(4):457-68. PMID: 12689651 [PubMed - indexed for MEDLINE] 114: Chibana K, Ishii Y, Asakura T, Fukuda T. Related Articles, Links Up-regulation of cysteinyl leukotriene 1 receptor by IL-13 enables human lung fibroblasts to respond to leukotriene C4 and produce eotaxin. J Immunol. 2003 Apr 15;170(8):4290-5. PMID: 12682264 [PubMed - indexed for MEDLINE]

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□115	: Shinagawa K, Trifilieff A, Anderson GP.	Related Articles, Links
	Involvement of CCR3-reactive chemokines in eosinopl Int Arch Allergy Immunol. 2003 Feb;130(2):150-7. PMID: 12673069 [PubMed - indexed for MEDLINE]	nil survival.
116	: Matsumoto N, Katoh S, Mukae H, Matsuo T, Takatsu K, Matsukura S.	Related Articles, Links
	Critical role of IL-5 in antigen-induced pulmonary eosi lymphocyte activation. Int Arch Allergy Immunol. 2003 Mar;130(3):209-15. PMID: 12660425 [PubMed - indexed for MEDLINE]	nophilia, but not in
□ 117	Lehto M, Koivuluhta M, Wang G, Amghaiab I, Majuri ML, Savolainen K, Turjanmaa K, Wolff H, Reunala T, Lauerma A, Palosuo T, Alenius H.	Related Articles, Links
	Epicutaneous natural rubber latex sensitization induces dermatitis and strong prohevein-specific IgE response. J Invest Dermatol. 2003 Apr;120(4):633-40. PMID: 12648228 [PubMed - indexed for MEDLINE]	T helper 2-type
□ 118	: Fiset PO. Soussi-Gounni A, Christodoulopoulos P, Tulic M, Sobo SE, Frenkiel S, Lavigne F, Lamkhioued B, Hamid Q.	Related Articles, Links
	Modulation of allergic response in nasal mucosa by ant oligodeoxynucleotides for IL-4. J Allergy Clin Immunol. 2003 Mar;111(3):580-6. PMID: 12642840 [PubMed - indexed for MEDLINE]	isense
□ 119	: Pinho V. Oliveira SH, Souza DG, Vasconcelos D, Alessandri AL, Lukacs NW, Teixeira MM.	Related Articles, Links
	The role of CCL22 (MDC) for the recruitment of eosing allergic pleurisy in mice. J Leukoc Biol. 2003 Mar;73(3):356-62. PMID: 12629149 [PubMed - indexed for MEDLINE]	ophils during
□ 120	lchinose T, Takano H, Sadakane K, Yanagisawa R, Kawazato H, Sagai M, Shibamoto T.	Related Articles, Links
	Differences in airway-inflammation development by hodiesel exhaust inhalation among mouse strains. Toxicol Appl Pharmacol. 2003 Feb 15;187(1):29-37. PMID: 12628582 [PubMed - indexed for MEDLINE]	ouse dust mite and
□ 121	Numanami H, Nelson DK, Hoyt JC, Freels JL, Habib M, Amano J, Haniuda M, Koyama S, Robbins RA	Related Articles, Links
	Peroxynitrite enhances interleukin-10 reduction in the r neutrophil chemotactic activity. Am J Respir Cell Mol Biol. 2003 Aug;29(2):239-44. Epub 2003 M PMID: 12626343 [PubMed - indexed for MEDLINE]	
□ 122	Inoue K, Takano H, Yoshikawa T.	Related Articles, Links
	Comments on the common cold. Lancet. 2003 Mar 1;361(9359):782. No abstract available. PMID: 12620758 [PubMed - indexed for MEDLINE]	
□ 123	Wu AY, Chik SC, Chan AW, Li Z, Tsang KW, Li W.	Related Articles, Links
	Anti-inflammatory effects of high-dose montelukast in acute asthma. Clin Exp Allergy. 2003 Mar;33(3):359-66. PMID: 12614451 [PubMed - indexed for MEDLINE]	an animal model of
□ 124	Birrell MA, McCluskie K, Haddad el-B, Battram CH, Webber SE,	Related Articles, Links

Foster ML, Yacoub MH, Belvisi MG.



Pharmacological assessment of the nitric-oxide synthase isoform involved in eosinophilic inflammation in a rat model of sephadex-induced airway inflammation.

J Pharmacol Exp Ther. 2003 Mar;304(3):1285-91. PMID: 12604708 [PubMed - indexed for MEDLINE]

125: Meyer P. Andersson M. Persson CG, Greiff L.

Related Articles, Links

Steroid-sensitive indices of airway inflammation in children with seasonal allergic rhinitis.

Pediatr Allergy Immunol. 2003 Feb;14(1):60-5.

PMID: 12603713 [PubMed - indexed for MEDLINE]

126: Gern JE, French DA, Grindle KA, Brockman-Schneider RA, Konno S, Busse WW

Related Articles, Links



Double-stranded RNA induces the synthesis of specific chemokines by bronchial epithelial cells.

Am J Respir Cell Mol Biol. 2003 Jun;28(6):731-7. Epub 2002 Dec 30.

PMID: 12600836 [PubMed - indexed for MEDLINE]

127: O'Bryan L, Pinkston P, Kumaraswami V, Vijayan V, Yenokida G, Related Articles, Links Rosenberg HF, Crystal R, Ottesen EA, Nutman TB.



Localized eosinophil degranulation mediates disease in tropical pulmonary eosinophilia.

Infect Immun. 2003 Mar;71(3):1337-42.

PMID: 12595450 [PubMed - indexed for MEDLINE]

128: Zimmermann N, Hershey GK, Foster PS, Rothenberg ME.

Related Articles, Links



Chemokines in asthma: cooperative interaction between chemokines and IL-13.

J Allergy Clin Immunol. 2003 Feb;111(2):227-42; quiz 243. Review.

PMID: 12589338 [PubMed - indexed for MEDLINE]

129: Pawankar R.

Related Articles, Links



Nasal polyposis: an update: editorial review.

Curr Opin Allergy Clin Immunol. 2003 Feb;3(1):1-6. Review.

PMID: 12582307 [PubMed - indexed for MEDLINE]

130: Johnson TR, Parker RA, Johnson JE, Graham BS.

Related Articles, Links



IL-13 is sufficient for respiratory syncytial virus G glycoprotein-induced eosinophilia after respiratory syncytial virus challenge.

J Immunol. 2003 Feb 15;170(4):2037-45.

PMID: 12574374 [PubMed - indexed for MEDLINE]

131: Lima C, Perini A, Garcia ML, Martins MA, Teixeira MM, Macedo MS.

Related Articles, Links



Eosinophilic inflammation and airway hyper-responsiveness are profoundly inhibited by a helminth (Ascaris suum) extract in a murine model of asthma.

Clin Exp Allergy. 2002 Nov;32(11):1659-66.

PMID: 12569989 [PubMed - indexed for MEDLINE]

132: Daheshia M. Tian N. Connolly T. Drawid A. Wu Q. Bienvenu JG. Related Articles, Links Cavallo J. Jupp R. De Sanctis GT, Minnich A.



Molecular characterization of antigen-induced lung inflammation in a murine model of asthma.

Ann N Y Acad Sci. 2002 Dec;975:148-59.

PMID: 12538161 [PubMed - indexed for MEDLINE]

h

133: Ohta K, Yamagami S, Wiggert B, Dana MR, Streilein JW. Related Articles, Links Chemokine gene expression in iris-ciliary body during experimental autoimmune uveoretinitis. Curr Eye Res. 2002 Jun;24(6):451-7. PMID: 12525972 [PubMed - indexed for MEDLINE] 134: Martin AP, Urrets-Zavalia J, Berra A, Mariani AL, Gallino N, Related Articles, Links Gomez Demel E, Gagliardi J, Baena-Cagnani CE, Urrets-Zavalia E. Serra HM. The effect of ketotifen on inflammatory markers in allergic conjunctivitis: an open, uncontrolled study. BMC Ophthalmol. 2003 Jan 06;3(1):2. PMID: 12515585 [PubMed - indexed for MEDLINE] 135: Kibe A. Inoue H. Fukuyama S. Machida K. Matsumoto K. Koto Related Articles, Links H, Ikegami T, Aizawa H, Hara N Differential regulation by glucocorticoid of interleukin-13-induced eosinophilia, hyperresponsiveness, and goblet cell hyperplasia in mouse airways. Am J Respir Crit Care Med. 2003 Jan 1;167(1):50-6. PMID: 12502476 [PubMed - indexed for MEDLINE] 136: Langdon C, Kerr C, Tong L, Richards CD. Related Articles, Links Oncostatin M regulates eotaxin expression in fibroblasts and eosinophilic inflammation in C57BL/6 mice. J Immunol. 2003 Jan 1;170(1):548-55. PMID: 12496442 [PubMed - indexed for MEDLINE] 137: Lamkhioued B, Abdelilah SG, Hamid Q, Mansour N, Delespesse Related Articles, Links G. Renzi PM. The CCR3 receptor is involved in eosinophil differentiation and is upregulated by Th2 cytokines in CD34+ progenitor cells. J Immunol. 2003 Jan 1;170(1):537-47. PMID. 12496441 [PubMed - indexed for MEDLINE] 138: Eum SY. Maghni K. Hamid Q. Campbell H. Eidelman DH. Related Articles, Links Martin JG. Involvement of the cysteinyl-leukotrienes in allergen-induced airway eosinophilia and hyperresponsiveness in the mouse. Am J Respir Cell Mol Biol. 2003 Jan;28(1):25-32. PMID: 12495929 [PubMed - indexed for MEDLINE] 139: Cui D. Zeng Z. Related Articles, Links [The expression and regulation of vascular cell adhesion molecules and eotaxin in bronchioles and lung tissue from a guinea-pig model of asthma] Zhonghua Jie He He Hu Xi Za Zhi. 2002 Nov,25(11):655-60. Chinese. PMID: 12490118 [PubMed - indexed for MEDLINE] 140: Saito N, Yamada Y, Sannohe S, Honda K, Adachi T, Kayaba H. Related Articles, Links Chihara J. Possible involvement of C-C chemokines in functional augmentation of adhesion molecules in asthmatic patients. Lung. 2002;180(5):251-63. PMID: 12489019 [PubMed - indexed for MEDLINE] 141: Falcao PL, Correa-Oliveira R, Fraga LA, Talvani A, Proudfoot Related Articles, Links AE, Wells TN, Williams TJ, Jose PJ, Teixeira MM. Plasma concentrations and role of macrophage inflammatory proteinlalpha during chronic Schistosoma mansoni infection in humans.

J Infect Dis. 2002 Dec 1;186(11):1696-700. Epub 2002 Nov 11. PMID: 12447751 [PubMed - indexed for MEDLINE] 142: Sabatini F, Silvestri M, Sale R, Scarso L, Defilippi AC, Risso FM, Related Articles, Links Rossi GA. Fibroblast-eosinophil interaction: modulation of adhesion molecules expression and chemokine release by human fetal lung fibroblasts in response to IL-4 and TNF-alpha. Immunol Lett. 2002 Dec 3;84(3):173-8. PMID: 12413733 [PubMed - indexed for MEDLINE] 143: van Rijt LS, Prins JB, Leenen PJ, Thielemans K, de Vries VC, Related Articles, Links Hoogsteden HC, Lambrecht BN Allergen-induced accumulation of airway dendritic cells is supported by an increase in CD31(hi)Ly-6C(neg) bone marrow precursors in a mouse model of asthma. Blood. 2002 Nov 15;100(10):3663-71. Epub 2002 Jul 12. PMID: 12393720 [PubMed - indexed for MEDLINE] 144: Scheerens J, van Gessel SB, Nijkamp FP, Folkerts G. Related Articles, Links Eotaxin protein levels and airway pathology in a mouse model for allergic asthma. Eur J Pharmacol. 2002 Oct 18;453(1):111-7. PMID: 12393066 [PubMed - indexed for MEDLINE] 145: Henderson WR Jr, Chi EY, Teo JL, Nguyen C, Kahn M. Related Articles, Links A small molecule inhibitor of redox-regulated NF-kappa B and activator protein-1 transcription blocks allergic airway inflammation in a mouse asthma model. J Immunol. 2002 Nov 1;169(9):5294-9. PMID: 12391249 [PubMed - indexed for MEDLINE] 146: Matsumoto N. Mukae H. Nakamura-Uchiyama F. Ashitani JI. Related Articles, Links Abe K, Katoh S, Kohno S, Nawa Y, Matsukura S. Elevated levels of thymus and activation-regulated chemokine (TARC) in = pleural effusion samples from patients infested with Paragonimus westermani. Clin Exp Immunol. 2002 Nov;130(2):314-8. PMID: 12390321 [PubMed - indexed for MEDLINE] 147: Freels JL, Nelson DK, Hoyt JC, Habib M, Numanami H, Lantz Related Articles, Links RC, Robbins RA. Enhanced activity of human IL-10 after nitration in reducing human IL-1 production by stimulated peripheral blood mononuclear cells. J Immunol. 2002 Oct 15;169(8):4568-71. PMID: 12370394 [PubMed - indexed for MEDLINE] 148: Bachert C, Gevaert P, Holtappels G, van Cauwenberge P. Related Articles, Links Mediators in nasal polyposis. Curr Allergy Asthma Rep. 2002 Nov;2(6):481-7. Review. PMID: 12359119 [PubMed - indexed for MEDLINE] 149: Arestides RS, He H, Westlake RM, Chen AI, Sharpe AH, Perkins Related Articles, Links DL. Finn PW. Costimulatory molecule OX40L is critical for both Th1 and Th2 responses in allergic inflammation. Eur J Immunol. 2002 Oct;32(10):2874-80. PMID: 12355440 [PubMed - indexed for MEDLINE] 150: Haczku A, Atochina EN, Tomer Y, Cao Y, Campbell C, Scanlon Related Articles, Links

ST, Russo SJ, Enhoming G, Beers MF.



The late asthmatic response is linked with increased surface tension and reduced surfactant protein B in mice.

Am J Physiol Lung Cell Mol Physiol. 2002 Oct;283(4):L755-65.

PMID: 12225952 [PubMed - indexed for MEDLINE]

151: Beaulieu S. Robbiani DF, Du X, Rodrigues E, Ignatius R, Wei Y, Related Articles, Links Ponath P. Young JW, Pope M, Steinman RM, Mojsov S.



Expression of a functional eotaxin (CC chemokine ligand 11) receptor CCR3 by human dendritic cells.

J Immunol. 2002 Sep 15;169(6):2925-36.

PMID: 12218106 [PubMed - indexed for MEDLINE]

152: Underwood SL, Haddad el-B, Birrell MA, McCluskie K, Pecoraro Related Articles, Links M, Dabrowski D, Webber SE, Foster ML, Belvisi MG

Functional characterization and biomarker identification in the Brown Norway model of allergic airway inflammation.

Br J Pharmacol. 2002 Sep;137(2):263-75.

PMID: 12208784 [PubMed - indexed for MEDLINE]

153: Ye YL, Huang WC, Lee YL, Chiang BL.

Related Articles, Links

Interleukin-12 inhibits eotaxin secretion of cultured primary lung cells and alleviates airway inflammation in vivo.

Cytokine. 2002 Jul 21;19(2):76-84.

PMID: 12182842 [PubMed - indexed for MEDLINE]

154: Khan S, Orenstein SR.

Related Articles, Links

Eosinophilic gastroenteritis: epidemiology, diagnosis and management.

Paediatr Drugs. 2002;4(9):563-70. Review.

PMID: 12175271 [PubMed - indexed for MEDLINE]

155: Rasp G.

Related Articles, Links

[Eosinophil inflammation of the nasal mucosa] Laryngorhinootologie. 2002 Jul;81(7):491-8. Review. German.

PMID: 12173060 [PubMed - indexed for MEDLINE]

156: Levy BD, De Sanctis GT, Devchand PR, Kim E, Ackerman K. Related Articles, Links Schmidt BA, Szczeklik W, Drazen JM, Serhan CN.

Multi-pronged inhibition of airway hyper-responsiveness and inflammation by lipoxin A(4).

Nat Med. 2002 Sep;8(9):1018-23. Epub 2002 Aug 12. PMID: 12172542 [PubMed - indexed for MEDLINE]

157: Knox AJ.

Related Articles, Links

The scientific rationale of combining inhaled glucocorticoids and long acting beta 2 adrenoceptor agonists.

Curr Pharm Des. 2002;8(20):1863-9. Review.

PMID: 12171538 [PubMed - indexed for MEDLINE]

158: Frezzolini A, Paradisi M, Zaffiro A, Provini A, Cadoni S, Ruffelli Related Articles, Links

Circulating interleukin 16 (IL-16) in children with atopic/eczema dermatitis syndrome (AEDS): a novel serological marker of disease activity.

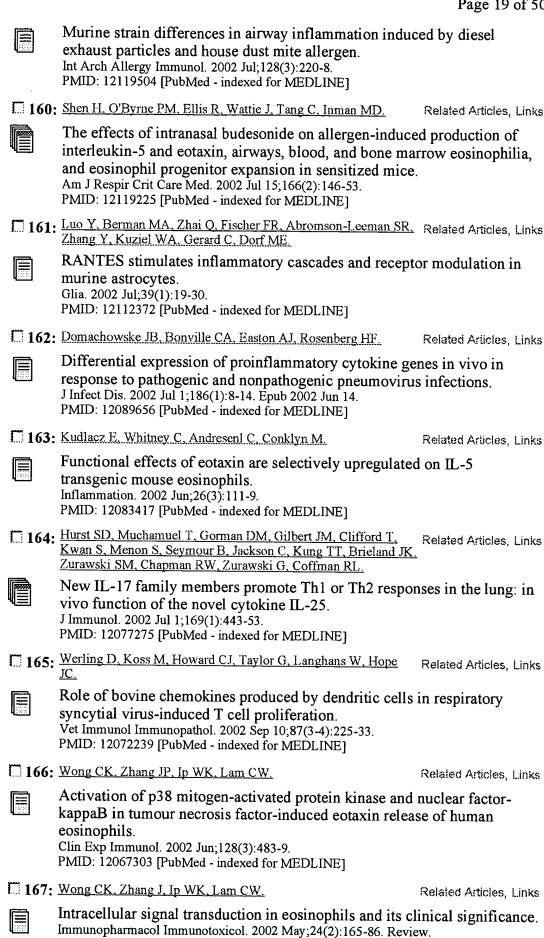
Allergy. 2002 Sep;57(9):815-20.

PMID: 12169178 [PubMed - indexed for MEDLINE]

159: Sadakane K, Ichinose T, Takano H, Yanagisawa R, Sagai M, Yoshikawa T, Shibamoto T.

Related Articles, Links

Related Articles, Links



h cb h g bе e e e fcg e ch

PMID: 12066845 [PubMed - indexed for MEDLINE]

168: Kline JN, Kitagaki K, Businga TR, Jain VV.



Treatment of established asthma in a murine model using CpG oligodeoxynucleotides.

Am J Physiol Lung Cell Mol Physiol. 2002 Jul;283(1):L170-9.

PMID: 12060574 [PubMed - indexed for MEDLINE]

1. 169: Vicentini L., Mazzi P., Caveggion E., Continolo S., Fumagalli L., Lapinet-Vera JA, Lowell CA, Berton G.



Fgr deficiency results in defective eosinophil recruitment to the lung during allergic airway inflammation.

J Immunol. 2002 Jun 15;168(12):6446-54.

PMID: 12055264 [PubMed - indexed for MEDLINE]

170: Silvestri M, Sabatini F, Scarso L, Cordone A, Dasic G, Rossi GA. Related Articles, Links



Fluticasone propionate downregulates nasal fibroblast functions involved in airway inflammation and remodeling.

Int Arch Allergy Immunol. 2002 May;128(1):51-8. PMID: 12037401 [PubMed - indexed for MEDLINE]

171: Tachimoto H. Kikuchi M, Hudson SA, Bickel CA, Hamilton RG, Related Articles, Links Bochner BS.



Eotaxin-2 alters eosinophil integrin function via mitogen-activated protein kinases.

Am J Respir Cell Mol Biol. 2002 Jun;26(6):645-9. PMID: 12034562 [PubMed - indexed for MEDLINE]

172: Ishihara Y, Kyono H, Kohyama N, Otaki N, Serita F, Toya T. Related Articles, Links



Effects of surface characteristics of potassium titanate whisker samples on acute lung injury induced by a single intratracheal administration in rats. Inhal Toxicol. 2002 May;14(5):503-19.

PMID: 12028805 [PubMed - indexed for MEDLINE]

173: Gorski P, Wittezak T, Walusiak J, Palezynski C, Ruta U, Kuna P, Related Articles, Links Alam R.



Eotaxin but not MCP-3 induces eosinophil influx into nasal fluid in allergic patients.

Allergy. 2002 Jun;57(6):519-28.

PMID: 12028117 [PubMed - indexed for MEDLINE]

☐ 174: <u>Romagnani S.</u>

Related Articles, Links



Cytokines and chemoattractants in allergic inflammation.

Mol Immunol. 2002 May;38(12-13):881-5. Review. PMID: 12009564 [PubMed - indexed for MEDLINE]

175: Bandeira-Melo C, Sugiyama K, Woods LJ, Phoofolo M, Center DM, Cruikshank WW, Weller PF.

Related Articles, Links



IL-16 promotes leukotriene C(4) and IL-4 release from human eosinophils via CD4- and autocrine CCR3-chemokine-mediated signaling.

J Immunol. 2002 May 1;168(9):4756-63.

PMID: 11971026 [PubMed - indexed for MEDLINE]

176: Luster AD.

Related Articles, Links



Antichemokine immunotherapy for allergic diseases.

Curr Opin Allergy Clin Immunol. 2001 Dec;1(6):561-7. Review. PMID: 11964742 [PubMed - indexed for MEDLINE]

177: Fu J, Chen P, Xiang X.

Related Articles, Links



h

[Eotaxin in induced sputum in patients with asthma and chronic bronchitis: relationship with airway inflammation] Zhonghua Jie He Hu Xi Za Zhi. 2002 Jan;25(1):29-32. Chinese.

cb hgeeefcg ech be

Page 21 of 50 PMID: 11953096 [PubMed - indexed for MEDLINE] 178: Foster PS, Yang M, Herbert C, Kumar RK. Related Articles, Links CD4(+) T-lymphocytes regulate airway remodeling and hyper-reactivity in a mouse model of chronic asthma. Lab Invest. 2002 Apr;82(4):455-62. PMID: 11950902 [PubMed - indexed for MEDLINE] 179: Poynter ME, Irvin CG, Janssen-Heininger YM. Related Articles, Links Rapid activation of nuclear factor-kappaB in airway epithelium in a murine model of allergic airway inflammation. Am J Pathol. 2002 Apr;160(4):1325-34. PMID: 11943717 [PubMed - indexed for MEDLINE] 180: Belleguic C, Corbel M, Germain N, Lena H, Boichot E, Delaval Related Articles, Links PH, Lagente V. Increased release of matrix metalloproteinase-9 in the plasma of acute severe asthmatic patients. Clin Exp Allergy. 2002 Feb;32(2):217-23. PMID: 11929485 [PubMed - indexed for MEDLINE] 181: Bandeira-Melo C, Bozza PT, Weller PF. Related Articles, Links The cellular biology of eosinophil eicosanoid formation and function. J Allergy Clin Immunol. 2002 Mar; 109(3):393-400. Review. PMID: 11897981 [PubMed - indexed for MEDLINE] 182: Smith S, Liggitt D, Jeromsky E, Tan X, Skerrett SJ, Wilson CB. Related Articles, Links Local role for tumor necrosis factor alpha in the pulmonary inflammatory response to Mycobacterium tuberculosis infection. Infect Immun. 2002 Apr;70(4):2082-9. PMID: 11895974 [PubMed - indexed for MEDLINE] 183: Corry DB, Rishi K, Kanellis J, Kiss A, Song Lz LZ, Xu J, Feng L. Related Articles, Links Werb Z, Kheradmand F. Decreased allergic lung inflammatory cell egression and increased susceptibility to asphyxiation in MMP2-deficiency. Nat Immunol. 2002 Apr;3(4):347-53. Epub 2002 Mar 11. PMID: 11887181 [PubMed - indexed for MEDLINE] 184: Haddad el-B, Underwood SL, Dabrowski D, Birrell MA, Related Articles, Links McCluskie K, Battram CH, Pecoraro M, Foster ML, Belvisi MG. Critical role for T cells in Sephadex-induced airway inflammation: pharmacological and immunological characterization and molecular biomarker identification. J Immunol. 2002 Mar 15;168(6):3004-16. PMID: 11884473 [PubMed - indexed for MEDLINE] 185; Zhu Z, Ma B, Zheng T, Homer RJ, Lee CG, Charo IF, Noble P. Related Articles, Links Elias JA. IL-13-induced chemokine responses in the lung: role of CCR2 in the pathogenesis of IL-13-induced inflammation and remodeling. J Immunol. 2002 Mar 15;168(6):2953-62. PMID: 11884467 [PubMed - indexed for MEDLINE]

186: Cheng SS, Lukacs NW, Kunkel SL. Related Articles, Links

Eotaxin/CCL11 suppresses IL-8/CXCL8 secretion from human dermal microvascular endothelial cells. J Immunol. 2002 Mar 15;168(6):2887-94.

PMID: 11884459 [PubMed - indexed for MEDLINE]

187: Blease K, Schuh JM, Jakubzick C, Lukacs NW, Kunkel SL, Joshi Related Articles, Links BH, Puri RK, Kaplan MH, Hogaboam CM. Stat6-deficient mice develop airway hyperresponsiveness and peribronchial fibrosis during chronic fungal asthma. Am J Pathol. 2002 Feb; 160(2):481-90. PMID: 11839568 [PubMed - indexed for MEDLINE] 188: Watanabe K, Jose PJ, Rankin SM. Related Articles, Links Eotaxin-2 generation is differentially regulated by lipopolysaccharide and IL-4 in monocytes and macrophages. J Immunol. 2002 Feb 15;168(4):1911-8. PMID: 11823526 [PubMed - indexed for MEDLINE] 189: Asano K, Nakamura M, Oguma T, Fukunaga K, Matsubara H. Related Articles, Links Shiomi T, Ishizaka A, Yamaguchi K, Kanazawa M Differential expression of CCR3 ligand mRNA in guinea pig lungs during allergen-induced inflammation. Inflamm Res. 2001 Dec;50(12):625-30. PMID: 11822789 [PubMed - indexed for MEDLINE] 190: Wert SE, Dey CR, Blair PA, Kimura S, Whitsett JA Related Articles, Links Increased expression of thyroid transcription factor-1 (TTF-1) in respiratory epithelial cells inhibits alveolarization and causes pulmonary inflammation. Dev Biol. 2002 Feb 15;242(2):75-87. PMID: 11820807 [PubMed - indexed for MEDLINE] 191: Calheiros AS, Aguiar Pires AL, Pereira da Silva J, Cordeiro RS. Related Articles, Links Martins MA, Lima MC. Role of the IgE-mediated system in eosinophil recruitment triggered by two consecutive cycles of sensitisation and challenge in rats. Int Arch Allergy Immunol. 2001 Dec;126(4):325-34. PMID: 11815740 [PubMed - indexed for MEDLINE] 192: Burke-Gaffney A, Blease K, Hartnell A, Hellewell PG. Related Articles, Links TNF-alpha potentiates C5a-stimulated eosinophil adhesion to human bronchial epithelial cells: a role for alpha 5 beta 1 integrin. J Immunol. 2002 Feb 1;168(3):1380-8. PMID: 11801679 [PubMed - indexed for MEDLINE] 193: Yamada K, Elliott WM, Brattsand R, Valeur A, Hogg JC, Hayashi Related Articles, Links Molecular mechanisms of decreased steroid responsiveness induced by latent adenoviral infection in allergic lung inflammation. J Allergy Clin Immunol. 2002 Jan;109(1):35-42. PMID: 11799363 [PubMed - indexed for MEDLINE] 194: Sakamoto H, Zhao LH, Jain F, Kradin R. Related Articles, Links IL-12p40(-/-) mice treated with intratracheal bleomycin exhibit decreased pulmonary inflammation and increased fibrosis. Exp Mol Pathol. 2002 Feb;72(1):1-9. PMID: 11784117 [PubMed - indexed for MEDLINE] 195: McMillan SJ, Bishop B, Townsend MJ, McKenzie AN, Lloyd Related Articles, Links CM. The absence of interleukin 9 does not affect the development of allergeninduced pulmonary inflammation nor airway hyperreactivity. J Exp Med. 2002 Jan 7;195(1):51-7. PMID: 11781365 [PubMed - indexed for MEDLINE]

b e

196: Bilenki L. Wang S, Fan Y, Yang J, Han X, Yang X Related Articles, Links Chlamydia trachomatis infection inhibits airway eosinophilic inflammation induced by ragweed. Clin Immunol. 2002 Jan; 102(1):28-36. PMID: 11781065 [PubMed - indexed for MEDLINE] 197: Michalec L. Choudhury BK, Postlethwait E, Wild JS, Alam R, Related Articles, Links Lett-Brown M, Sur S. CCL7 and CXCL10 orchestrate oxidative stress-induced neutrophilic lung inflammation. J Immunol. 2002 Jan 15;168(2):846-52. PMID: 11777981 [PubMed - indexed for MEDLINE] 198: Jahnz-Rozyk K, Glodzinska-Wyszogrodzka E, Rozynska-Related Articles, Links Polanska R. Paluchowska E. Zabielski LS. The effect of specific immunotherapy on serum eotaxin level in patients with pollinosis: preliminary studies] Pol Merkuriusz Lek. 2001 Sep;11(63):244-6. Polish. PMID: 11761820 [PubMed - indexed for MEDLINE] 199: Menzies-Gow A, Robinson DS. Related Articles, Links Eosinophils, eosinophilic cytokines (interleukin-5), and antieosinophilic therapy in asthma. Curr Opin Pulm Med. 2002 Jan;8(1):33-8. Review. PMID: 11753121 [PubMed - indexed for MEDLINE] 200: Fujitani Y, Kanaoka Y, Aritake K, Uodome N, Okazaki-Hatake Related Articles, Links K, Urade Y. Pronounced eosinophilic lung inflammation and Th2 cytokine release in human lipocalin-type prostaglandin D synthase transgenic mice. J Immunol. 2002 Jan 1;168(1):443-9. PMID: 11751991 [PubMed - indexed for MEDLINE] 201: Chiu BC, Shang X, Frait KA, Hu JS, Komuniecki E, Miller RA. Related Articles, Links Chensue SW. Differential effects of ageing on cytokine and chemokine responses during type-1 (mycobacterial) and type-2 (schistosomal) pulmonary granulomatous inflammation in mice. Mech Ageing Dev. 2002 Feb;123(4):313-26. PMID: 11744043 [PubMed - indexed for MEDLINE] 202: Crosby JR, Shen HH, Borchers MT, Justice JP, Ansay T, Lee JJ, Related Articles, Links Lee NA. Ectopic expression of IL-5 identifies an additional CD4(+) T cell mechanism of airway eosinophil recruitment. Am J Physiol Lung Cell Mol Physiol. 2002 Jan;282(1):L99-108. PMID: 11741821 [PubMed - indexed for MEDLINE] 203: van den Toorn LM, Overbeek SE, de Jongste JC, Leman K, Related Articles, Links Hoogsteden HC, Prins JB. Airway inflammation is present during clinical remission of atopic asthma. Am J Respir Crit Care Med. 2001 Dec 1;164(11):2107-13. Erratum in: Am J Respir Crit Care Med. 2002 Oct 15;166(8):1143. PMID: 11739143 [PubMed - indexed for MEDLINE] 204: Tomkinson A, Duez C, Cieslewicz G, Gelfand EW. Related Articles, Links Eotaxin-1-deficient mice develop airway eosinophilia and airway hyperresponsiveness. Int Arch Allergy Immunol. 2001 Oct;126(2):119-25. PMID: 11729349 [PubMed - indexed for MEDLINE]

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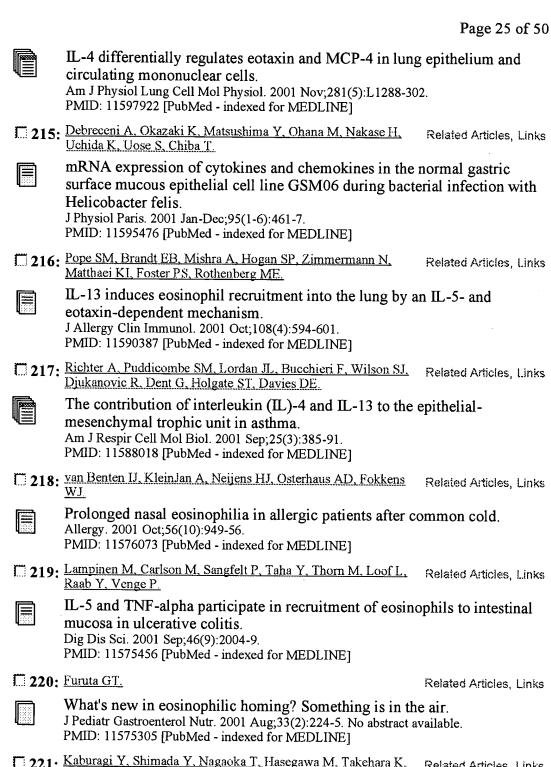
b e

205: Lilly CM, Daugherty BL. Related Articles, Links A novel LPS-inducible CCR3 activator: why so many CCR3 ligands? Am J Respir Cell Mol Biol. 2001 Dec;25(6):673-5. No abstract available. PMID: 11726391 [PubMed - indexed for MEDLINE] 206: Li Y, Martin LD, Minnicozzi M, Greenfeder S, Fine J, Pettersen Related Articles, Links CA, Chorley B, Adler KB Enhanced expression of mucin genes in a guinea pig model of allergic Am J Respir Cell Mol Biol. 2001 Nov;25(5):644-51. PMID: 11713108 [PubMed - indexed for MEDLINE] 207: Power UF, Huss T, Michaud V, Plotnicky-Gilquin H, Bonnefoy Related Articles, Links JY, Nguyen TN. Differential histopathology and chemokine gene expression in lung tissues following respiratory syncytial virus (RSV) challenge of formalininactivated RSV- or BBG2Na-immunized mice. J Virol. 2001 Dec;75(24):12421-30. PMID: 11711632 [PubMed - indexed for MEDLINE] 208: Walters DM, Breysse PN, Wills-Karp M. Related Articles, Links Ambient urban Baltimore particulate-induced airway hyperresponsiveness and inflammation in mice. Am J Respir Crit Care Med. 2001 Oct 15;164(8 Pt 1):1438-43. PMID: 11704592 [PubMed - indexed for MEDLINE] 209: Yang M, Hogan SP, Henry PJ, Matthaei KI, McKenzie AN, Related Articles, Links Young IG, Rothenberg ME, Foster PS. Interleukin-13 mediates airways hyperreactivity through the IL-4 receptoralpha chain and STAT-6 independently of IL-5 and eotaxin. Am J Respir Cell Mol Biol. 2001 Oct;25(4):522-30. PMID: 11694459 [PubMed - indexed for MEDLINE] 210: Kawaguchi M, Kokubu F, Kuga H, Matsukura S, Hoshino H, Ieki Related Articles, Links K. Imai T, Adachi M, Huang SK. Modulation of bronchial epithelial cells by IL-17. J Allergy Clin Immunol. 2001 Nov;108(5):804-9. PMID: 11692108 [PubMed - indexed for MEDLINE] 211: Yamauchi K. Related Articles, Links [Airway inflammatory marker] Nippon Rinsho. 2001 Oct;59(10):1938-44. Review. Japanese. PMID: 11676135 [PubMed - indexed for MEDLINE] 212: Saito N. Chihara J. Related Articles, Links [Chemokine (RANTES, eotaxin, etc.)] Nippon Rinsho. 2001 Oct;59(10):1900-5. Review. Japanese. PMID: 11676129 [PubMed - indexed for MEDLINE] 213: Park MK, Hoffmann KF, Cheever AW, Amichay D, Wynn TA, Related Articles, Links Farber JM. Patterns of chemokine expression in models of Schistosoma mansoni

inflammation and infection reveal relationships between type 1 and type 2 responses and chemokines in vivo.

Infect Immun. 2001 Nov;69(11):6755-68. PMID: 11598048 [PubMed - indexed for MEDLINE]

214: Nakamura H, Luster AD, Tateno H, Jedrzkiewicz S, Tamura G. Related Articles, Links Haley KJ, Garcia-Zepeda EA, Yamaguchi K, Lilly CM



221: Kaburagi Y, Shimada Y, Nagaoka T, Hasegawa M, Takehara K, Related Articles, Links Sato S.

Enhanced production of CC-chemokines (RANTES, MCP-1, MIP-1alpha, MIP-1beta, and eotaxin) in patients with atopic dermatitis. Arch Dermatol Res. 2001 Jul;293(7):350-5. PMID: 11550808 [PubMed - indexed for MEDLINE]

222: Hoeck J. Woisetschlager M.

223: Chen LC, Zhang Z, Myers AC, Huang SK.

Related Articles, Links

Related Articles, Links

Activation of eotaxin-3/CCL126 gene expression in human dermal fibroblasts is mediated by STAT6. J Immunol. 2001 Sep 15;167(6):3216-22.

PMID: 11544308 [PubMed - indexed for MEDLINE]

Cutting edge: altered pulmonary eosinophilic inflammation in mice



deficient for Clara cell secretory 10-kDa protein.

J Immunol. 2001 Sep 15;167(6):3025-8.

PMID: 11544284 [PubMed - indexed for MEDLINE]

224: Economou E, Tousoulis D, Katinioti A, Stefanadis C, Trikas A, Related Articles, Links Pitsavos C, Tentolouris C, Toutouza MG, Toutouzas P.

Chemokines in patients with ischaemic heart disease and the effect of coronary angioplasty.

Int J Cardiol. 2001 Aug;80(1):55-60.

PMID: 11532547 [PubMed - indexed for MEDLINE]

225: Jeziorska M, Haboubi N, Schofield P, Woolley DE.

Related Articles, Links

Distribution and activation of eosinophils in inflammatory bowel disease using an improved immunohistochemical technique.

J Pathol. 2001 Aug; 194(4): 484-92.

PMID: 11523058 [PubMed - indexed for MEDLINE]

226: Hallsworth MP, Moir LM, Lai D, Hirst SJ.

Related Articles, Links

Inhibitors of mitogen-activated protein kinases differentially regulate eosinophil-activating cytokine release from human airway smooth muscle. Am J Respir Crit Care Med. 2001 Aug 15;164(4):688-97.

PMID: 11520738 [PubMed - indexed for MEDLINE]

227: Terada N, Hamano N, Kim WJ, Hirai K, Nakajima T, Yamada H, Related Articles, Links Kawasaki H, Yamashita T, Kishi H, Nomura T, Numata T, Yoshie O, Konno A



The kinetics of allergen-induced eotaxin level in nasal lavage fluid: its key role in eosinophil recruitment in nasal mucosa.

Am J Respir Crit Care Med. 2001 Aug 15;164(4):575-9. PMID: 11520718 [PubMed - indexed for MEDLINE]

228: Kim J, Merry AC, Nemzek JA, Bolgos GL, Siddiqui J, Remick Related Articles, Links DG.



Eotaxin represents the principal eosinophil chemoattractant in a novel murine asthma model induced by house dust containing cockroach allergens.

J Immunol. 2001 Sep 1;167(5):2808-15.

PMID: 11509626 [PubMed - indexed for MEDLINE]

229: Kanwar S, Smith CW, Shardonofsky FR, Burns AR

Related Articles, Links



The role of Mac-1 (CD11b/CD18) in antigen-induced airway eosinophilia

Am J Respir Cell Mol Biol. 2001 Aug;25(2):170-7. PMID: 11509326 [PubMed - indexed for MEDLINE]

230: Chung KF, Adcock IM.

Related Articles, Links



Pathophysiological mechanisms of asthma. Application of cell and molecular biology techniques.

Mol Biotechnol. 2001 Jul;18(3):213-32. Review.

PMID: 11503516 [PubMed - indexed for MEDLINE]

231: Amerio P, Verdolini R, Proietto G, Feliciani C, Toto P, Shivji G, Related Articles, Links Loconsole F, Cassano N, Amerio P, Vena G, Sauder DN.



Role of Th2 cytokines, RANTES and eotaxin in AIDS-associated eosinophilic folliculitis.

Acta Derm Venereol. 2001 May;81(2):92-5.

PMID: 11501668 [PubMed - indexed for MEDLINE]

232: Adcock IM, Caramori G.

Related Articles, Links

h

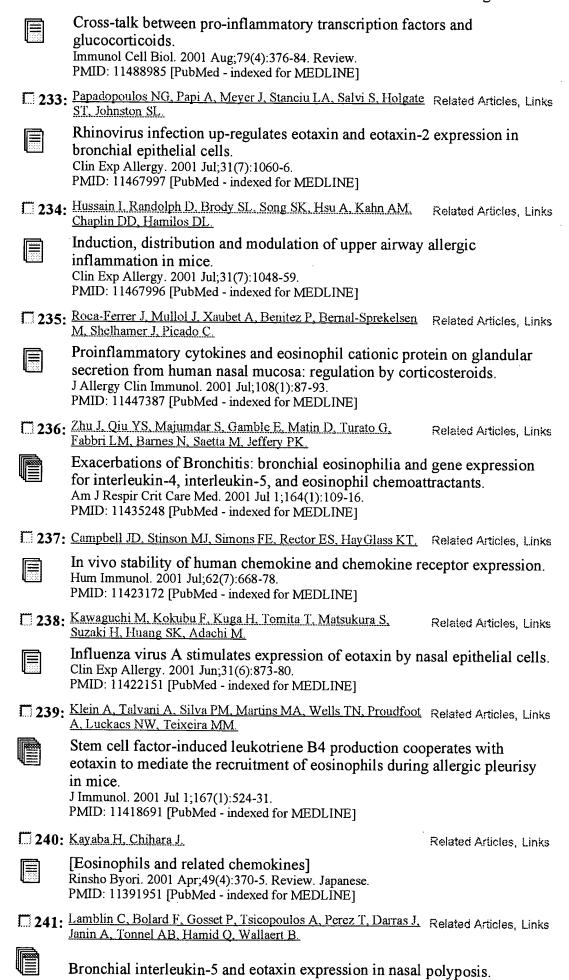
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e fcg

e ch

b e

Relationship with (a)symptomatic bronchial hyperresponsiveness. Am J Respir Crit Care Med. 2001 Apr;163(5):1226-32. PMID: 11316663 [PubMed - indexed for MEDLINE] 242: Nakajima T, Imanishi M, Yamamoto K, Cyong JC, Hirai K. Related Articles, Links Inhibitory effect of baicalein, a flavonoid in Scutellaria Root, on eotaxin production by human dermal fibroblasts. Planta Med. 2001 Mar;67(2):132-5. PMID: 11301858 [PubMed - indexed for MEDLINE] 243: Vliagoftis H, Befus AD, Hollenberg MD, Mogbel R. Related Articles, Links Airway epithelial cells release eosinophil survival-promoting factors (GM-CSF) after stimulation of proteinase-activated receptor 2. J Allergy Clin Immunol. 2001 Apr;107(4):679-85. PMID: 11295658 [PubMed - indexed for MEDLINE] 244: Bachert C, Gevaert P. Holtappels G, Johansson SG, van Related Articles, Links Cauwenberge P. Total and specific IgE in nasal polyps is related to local eosinophilic inflammation. J Allergy Clin Immunol. 2001 Apr;107(4):607-14. PMID: 11295647 [PubMed - indexed for MEDLINE] 245: Foster PS, Mould AW, Yang M, Mackenzie J, Mattes J, Hogan Related Articles, Links SP. Mahalingam S, Mckenzie AN, Rothenberg ME, Young IG, Matthaei KI, Webb DC. Elemental signals regulating eosinophil accumulation in the lung. Immunol Rev. 2001 Feb;179:173-81. Review. PMID: 11292021 [PubMed - indexed for MEDLINE] ☐ **246:** Broide D, Sriramarao P. Related Articles, Links Eosinophil trafficking to sites of allergic inflammation. Immunol Rev. 2001 Feb;179:163-72. Review. PMID: 11292020 [PubMed - indexed for MEDLINE] 247: Petering H, Kluthe C, Dulkys Y, Kiehl P, Ponath PD, Kapp A. Related Articles, Links Elsner J. Characterization of the CC chemokine receptor 3 on human keratinocytes. J Invest Dermatol. 2001 Apr;116(4):549-55. PMID: 11286622 [PubMed - indexed for MEDLINE] 248: Hogan SP, Mishra A, Brandt EB, Royalty MP, Pope SM. Related Articles, Links Zimmermann N, Foster PS, Rothenberg ME. A pathological function for eotaxin and eosinophils in eosinophilic gastrointestinal inflammation. Nat Immunol. 2001 Apr;2(4):353-60. PMID: 11276207 [PubMed - indexed for MEDLINE] 249: Bandeira-Melo C, Phoofolo M, Weller PF. Related Articles, Links Extranuclear lipid bodies, elicited by CCR3-mediated signaling pathways, are the sites of chemokine-enhanced leukotriene C4 production in eosinophils and basophils. J Biol Chem. 2001 Jun 22;276(25):22779-87. Epub 2001 Mar 26. PMID: 11274187 [PubMed - indexed for MEDLINE] 250: Webb DC, McKenzie AN, Matthaei KI, Rothenberg ME, Foster Related Articles, Links Distinct spatial requirement for eosinophil-induced airways hyperreactivity. Immunol Cell Biol. 2001 Apr;79(2):165-9. Review.

PMID: 11264712 [PubMed - indexed for MEDLINE] 251: Ogilvie P, Bardi G, Clark-Lewis I, Baggiolini M, Uguccioni M. Related Articles, Links Eotaxin is a natural antagonist for CCR2 and an agonist for CCR5. Blood. 2001 Apr 1;97(7):1920-4. PMID: 11264152 [PubMed - indexed for MEDLINE] 252: Sabroe I, Williams TJ, Pease JE. Related Articles, Links Roles of chemokines in the regulation of leucocyte recruitment. Clin Sci (Lond). 2001 Apr;100(4):359-62. PMID: 11256972 [PubMed - indexed for MEDLINE] 253: Hoeck J. Woisetschlager M. Related Articles, Links STAT6 mediates eotaxin-1 expression in IL-4 or TNF-alpha-induced fibroblasts. J Immunol. 2001 Apr 1;166(7):4507-15. PMID: 11254707 [PubMed - indexed for MEDLINE] 254: Lampinen M, Hakansson L, Venge P. Related Articles, Links Interleukin-2 inhibits eosinophil migration but is counteracted by IL-5 priming. Clin Exp Allergy. 2001 Feb;31(2):249-58. PMID: 11251626 [PubMed - indexed for MEDLINE] 255: Corrigan C. Related Articles, Links The eotaxins in asthma and allergic inflammation: implications for Curr Opin Investig Drugs. 2000 Nov;1(3):321-8. Review. PMID: 11249715 [PubMed - indexed for MEDLINE] 256: Braunstahl GJ, Overbeek SE, Kleinjan A, Prins JB, Hoogsteden Related Articles, Links HC, Fokkens WJ. Nasal allergen provocation induces adhesion molecule expression and tissue eosinophilia in upper and lower airways. J Allergy Clin Immunol. 2001 Mar; 107(3):469-76. PMID: 11240947 [PubMed - indexed for MEDLINE] 257: Wakugawa M, Nakamura K, Akatsuka M, Kim SS, Yamada Y. Related Articles, Links Kawasaki H, Tamaki K, Furue M. Expression of CC chemokine receptor 3 on human keratinocytes in vivo and in vitro--upregulation by RANTES. J Dermatol Sci. 2001 Apr;25(3):229-35. PMID: 11240271 [PubMed - indexed for MEDLINE] 258: Fahy O, Porte H, Senechal S, Vorng H, McEuen AR, Buckley Related Articles, Links MG, Walls AF, Wallaert B, Tonnel AB, Tsicopoulos A Chemokine-induced cutaneous inflammatory cell infiltration in a model of Hu-PBMC-SCID mice grafted with human skin. Am J Pathol. 2001 Mar;158(3):1053-63. PMID: 11238053 [PubMed - indexed for MEDLINE] 259: Jeffery PK. Related Articles, Links

Lymphocytes, chronic bronchitis and chronic obstructive pulmonary

Novartis Found Symp. 2001;234:149-61; discussion 161-8. Review. PMID: 11199094 [PubMed - indexed for MEDLINE]

260: Wiley R, Palmer K, Gajewska B, Stampfli M, Alvarez D, Coyle Related Articles, Links A. Gutierrez-Ramos J, Jordana M.



Expression of the Th1 chemokine IFN-gamma-inducible protein 10 in the airway alters mucosal allergic sensitization in mice.

J Immunol. 2001 Feb 15;166(4):2750-9.

PMID: 11160341 [PubMed - indexed for MEDLINE]

261: Wang S, Fan Y, Han X, Yang J, Bilenki L, Yang X.

Related Articles, Links



IL-12-dependent vascular cell adhesion molecule-1 expression contributes to airway eosinophilic inflammation in a mouse model of asthma-like reaction.

J Immunol. 2001 Feb 15;166(4):2741-9.

PMID: 11160340 [PubMed - indexed for MEDLINE]

262: Stellato C, Brummet ME, Plitt JR, Shahabuddin S, Baroody FM, Related Articles, Links Liu MC, Ponath PD, Beck LA.



Expression of the C-C chemokine receptor CCR3 in human airway epithelial cells.

J Immunol. 2001 Feb 1;166(3):1457-61.

PMID: 11160184 [PubMed - indexed for MEDLINE]

263: Hallsworth MP, Twort CH, Lee TH, Hirst SJ.

Related Articles, Links



beta(2)-adrenoceptor agonists inhibit release of eosinophil-activating cytokines from human airway smooth muscle cells.

Br J Pharmacol. 2001 Feb; 132(3):729-41.

PMID: 11159726 [PubMed - indexed for MEDLINE]

264: Louahed J, Zhou Y, Maloy WL, Rani PU, Weiss C, Tomer Y, Vink A, Renauld J, Van Snick J, Nicolaides NC, Levitt RC, Haczku A.



Interleukin 9 promotes influx and local maturation of eosinophils.

Blood. 2001 Feb 15;97(4):1035-42.

PMID: 11159534 [PubMed - indexed for MEDLINE]

265: Fujikura T. Shimosawa T. Yakuo I.

Related Articles, Links



Regulatory effect of histamine H1 receptor antagonist on the expression of messenger RNA encoding CC chemokines in the human nasal mucosa.

J Allergy Clin Immunol. 2001 Jan;107(1):123-8. PMID: 11150001 [PubMed - indexed for MEDLINE]

266: Matute-Bello G, Winn RK, Jonas M, Chi EY, Martin TR, Liles WC.

Related Articles, Links



Fas (CD95) induces alveolar epithelial cell apoptosis in vivo: implications for acute pulmonary inflammation.

Am J Pathol. 2001 Jan; 158(1):153-61.

PMID: 11141488 [PubMed - indexed for MEDLINE]

267: Gutierrez-Ramos JC, Lloyd C, Kapsenberg ML, Gonzalo JA, Related Articles, Links Coyle AJ



Non-redundant functional groups of chemokines operate in a coordinate manner during the inflammatory response in the lung.

Immunol Rev. 2000 Oct;177:31-42. Review.

PMID: 11138782 [PubMed - indexed for MEDLINE]

268: Haeberle HA, Kuziel WA, Dieterich HJ, Casola A, Gatalica Z. Related Articles, Links Garofalo RP.



Inducible expression of inflammatory chemokines in respiratory syncytial virus-infected mice: role of MIP-1alpha in lung pathology.

J Virol. 2001 Jan;75(2):878-90.

PMID: 11134301 [PubMed - indexed for MEDLINE]

269: Mishra A. Hogan SP, Brandt EB, Rothenberg ME.

Related Articles, Links



An etiological role for aeroallergens and eosinophils in experimental esophagitis.

J Clin Invest. 2001 Jan; 107(1):83-90.

PMID: 11134183 [PubMed - indexed for MEDLINE]

270: Jahnz-Ro vk K, Plusa T, Mierzejewska J.

Related Articles, Links

Eotaxin in serum of patients with asthma or chronic obstructive pulmonary disease: relationship with eosinophil cationic protein and lung function. Mediators Inflamm. 2000;9(3-4):175-9.

PMID: 11132775 [PubMed - indexed for MEDLINE]

271: Mishra A, Weaver TE, Beck DC, Rothenberg ME

Related Articles, Links



Interleukin-5-mediated allergic airway inflammation inhibits the human surfactant protein C promoter in transgenic mice.

J Biol Chem. 2001 Mar 16;276(11):8453-9. Epub 2000 Dec 11.

PMID: 11113143 [PubMed - indexed for MEDLINE]

272: Yawalkar N. Shrikhande M, Hari Y, Nievergelt H, Braathen LR, Pichler WJ. Related Articles, Links

Evidence for a role for IL-5 and eotaxin in activating and recruiting eosinophils in drug-induced cutaneous eruptions.

LAllergy Clip Impured, 2000 Dec; 106(6):1171.6

J Allergy Clin Immunol. 2000 Dec;106(6):1171-6. PMID: 11112902 [PubMed - indexed for MEDLINE]

173: Lemiere C, Chaboilliez S, Trudeau C, Taha R, Maghni K, Martin Related Articles, Links JG, Hamid Q.



Characterization of airway inflammation after repeated exposures to occupational agents.

J Allergy Clin Immunol. 2000 Dec;106(6):1163-70. PMID: 11112901 [PubMed - indexed for MEDLINE]

274: Finotto S, Galle PR, Neurath MF.

Related Articles, Links



[Immunopathogenesis of bronchial asthma]

Pneumologie. 2000 Sep;54(9):412-8. Review. German. PMID: 11072728 [PubMed - indexed for MEDLINE]

17275: Larbi KY, Allen AR, Tam FW, Haskard DO, Lobb RR, Silva PM, Related Articles, Links Nourshargh S.



VCAM-1 has a tissue-specific role in mediating interleukin-4-induced eosinophil accumulation in rat models: evidence for a dissociation between endothelial-cell VCAM-1 expression and a functional role in eosinophil migration.

Blood. 2000 Nov 15;96(10):3601-9.

PMID: 11071660 [PubMed - indexed for MEDLINE]

276: Bachert C, Gevaert P, Holtappels G, Cuvelier C, van Cauwenberge P.

Related Articles, Links



Nasal polyposis: from cytokines to growth.

Am J Rhinol. 2000 Sep-Oct;14(5):279-90.

PMID: 11068652 [PubMed - indexed for MEDLINE]

277: Bertrand CP, Ponath PD.

Related Articles, Links



CCR3 blockade as a new therapy for asthma.

Expert Opin Investig Drugs. 2000 Jan;9(1):43-52. Review. PMID: 11060659 [PubMed - indexed for MEDLINE]

278: Haley KJ, Lilly CM, Yang JH, Feng Y, Kennedy SP, Turi TG, Thompson JF, Sukhova GH, Libby P, Lee RT.

Related Articles, Links



Overexpression of eotaxin and the CCR3 receptor in human

atherosclerosis: using genomic technology to identify a potential novel pathway of vascular inflammation.

Circulation. 2000 Oct 31:102(18):2185-9.

PMID: 11056090 [PubMed - indexed for MEDLINE]

279: Wang J, Homer RJ, Chen Q, Elias JA.

Related Articles, Links



Endogenous and exogenous IL-6 inhibit aeroallergen-induced Th2 inflammation.

J Immunol. 2000 Oct 1;165(7):4051-61.

PMID: 11034416 [PubMed - indexed for MEDLINE]

280: Katoh S, Matsumoto N, Fukushima K, Mukae H, Kadota JI. Kohno S, Matsukura S.

Related Articles, Links

Elevated chemokine levels in bronchoalveolar lavage fluid of patients with eosinophilic pneumonia.

J Allergy Clin Immunol. 2000 Oct;106(4):730-6. PMID: 11031344 [PubMed - indexed for MEDLINE]

281: Diaz-Sanchez D, Jyrala M, Ng D, Nel A, Saxon A.

Related Articles, Links

In vivo nasal challenge with diesel exhaust particles enhances expression of the CC chemokines rantes, MIP-1alpha, and MCP-3 in humans.

Clin Immunol. 2000 Nov;97(2):140-5.

PMID: 11027454 [PubMed - indexed for MEDLINE]

282: Matikainen S, Pirhonen J, Miettinen M, Lehtonen A, Govenius-Related Articles, Links Vintola C, Sareneva T, Julkunen I.

Influenza A and sendai viruses induce differential chemokine gene expression and transcription factor activation in human macrophages.

Virology. 2000 Oct 10;276(1):138-47. PMID: 11022002 [PubMed - indexed for MEDLINE]

283: Pullerits T. Linden A. Praks L. Cardell LO, Lotvall J.

Related Articles, Links

Upregulation of nasal mucosal eotaxin in patients with allergic rhinitis during grass pollen season: effect of a local glucocorticoid.

Clin Exp Allergy. 2000 Oct;30(10):1469-75.

PMID: 10998025 [PubMed - indexed for MEDLINE]

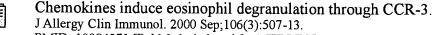
284: Allakhverdi Z, Lamkhioued B, Olivenstein R, Hamid Q, Renzi Related Articles, Links



CD8 depletion-induced late airway response is characterized by eosinophilia, increased eotaxin, and decreased IFN-gamma expression in

Am J Respir Crit Care Med. 2000 Sep;162(3 Pt 1):1123-31. PMID: 10988141 [PubMed - indexed for MEDLINE]

285: Fujisawa T, Kato Y, Nagase H, Atsuta J, Terada A, Iguchi K, Related Articles, Links Kamiya H. Morita Y. Kitaura M. Kawasaki H. Yoshie O. Hirai K.



J Allergy Clin Immunol. 2000 Sep; 106(3):507-13. PMID: 10984371 [PubMed - indexed for MEDLINE]

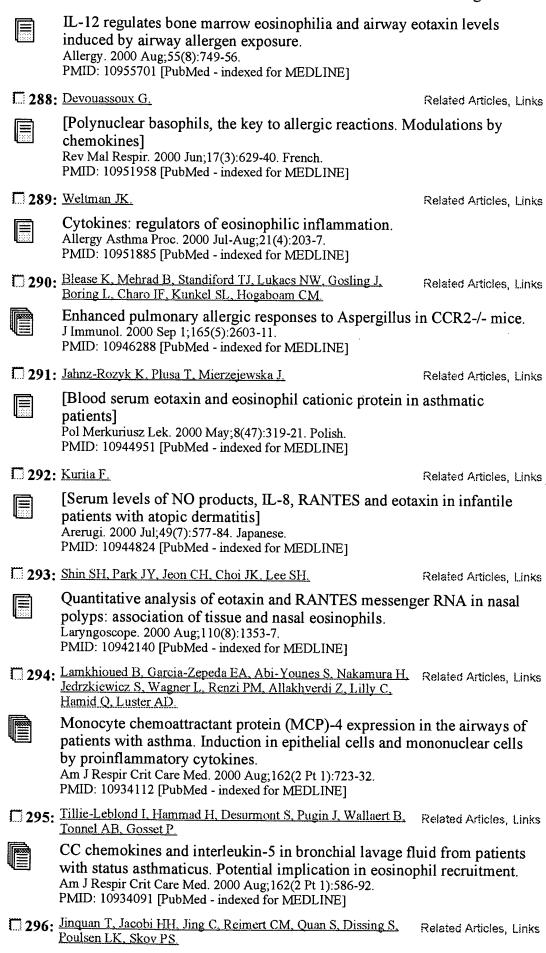
286: Proost P, Menten P, Struyf S, Schutyser E, De Meester I, Van Related Articles, Links Damme J.



Cleavage by CD26/dipeptidyl peptidase IV converts the chemokine LD78beta into a most efficient monocyte attractant and CCR1 agonist. Blood. 2000 Sep 1;96(5):1674-80.

PMID: 10961862 [PubMed - indexed for MEDLINE]

287: Zhao LL, Linden A, Sjostrand M, Cui ZH, Lotvall J, Jordana M. Related Articles, Links



Chemokine stromal cell-derived factor 1alpha activates basophils by

h cb hg e e e fcg e ch b e

		•
	means of CXCR4. J Allergy Clin Immunol. 2000 Aug;106(2):313-20. PMID: 10932076 [PubMed - indexed for MEDLINE]	
□ 297:	Wakugawa M, Nakamura K, Hino H, Toyama K, Hattori N, Okochi H, Yamada H, Hirai K, Tamaki K, Furue M	Related Articles, Links
	Elevated levels of eotaxin and interleukin-5 in blister flepemphigoid: correlation with tissue eosinophilia. Br J Dermatol. 2000 Jul;143(1):112-6. PMID: 10886144 [PubMed - indexed for MEDLINE]	uid of bullous
□ 298:	Blease K, Mehrad B, Standiford TJ, Lukacs NW, Kunkel SL, Chensue SW, Lu B, Gerard CJ, Hogaboam CM.	Related Articles, Links
	Airway remodeling is absent in CCR1-/- mice during challergic airway disease. J Immunol. 2000 Aug 1;165(3):1564-72. PMID: 10903765 [PubMed - indexed for MEDLINE]	nronic fungal
□ 299:	Yokoyama A, Kohno N, Ito M, Abe M, Hiwada K, Yamada H, Matsushima K, Hirai K.	Related Articles, Links
	Eotaxin levels in pleural effusions: comparison with mochemoattractant protein-1 and IL-8. Intern Med. 2000 Jul;39(7):547-52. PMID: 10888210 [PubMed - indexed for MEDLINE]	onocyte
□ 300:	Sato E, Nelson DK, Koyama S, Hoyt JC, Robbins RA.	Related Articles, Links
	Bradykinin stimulates eotaxin production by a human luline. J Allergy Clin Immunol. 2000 Jul;106(1 Pt 1):117-23. PMID: 10887314 [PubMed - indexed for MEDLINE]	ung fibroblast cell
□301:	Nopp A, Hallden G, Lundahl J, Johansson E, Vrtala S, Valenta R, Gronneberg R, Van Hage-Hamsten M.	Related Articles, Links
	Comparison of inflammatory responses to genetically enhypoallergenic derivatives of the major birch pollen aller recombinant bet v 1 wild type in skin chamber fluids copollen-allergic patients. J Allergy Clin Immunol. 2000 Jul;106(1 Pt 1):101-9. PMID: 10887312 [PubMed - indexed for MEDLINE]	ergen bet v 1 and to
□ 302:	Gangur V, Oppenheim JJ.	Related Articles, Links
	Are chemokines essential or secondary participants in a Ann Allergy Asthma Immunol. 2000 Jun;84(6):569-79; quiz 579-8 PMID: 10875484 [PubMed - indexed for MEDLINE]	llergic responses? 1. Review.
□ 303:	Miyamasu M, Misaki Y, Yamaguchi M, Yamamoto K, Morita Y, Matsushima K, Nakajima T, Hirai K.	Related Articles, Links
	Regulation of human eotaxin generation by Th1-/Th2-d Int Arch Allergy Immunol. 2000 May;122 Suppl 1:54-8. PMID: 10867510 [PubMed - indexed for MEDLINE]	erived cytokines.
□ 304:	Saito H, Shimizu H, Akiyama K.	Related Articles, Links
	Autocrine regulation of eotaxin in normal human broncl Int Arch Allergy Immunol. 2000 May;122 Suppl 1:50-3. PMID: 10867509 [PubMed - indexed for MEDLINE]	nial epithelial cells.
□ 305:	Harris MT, Feldberg RS, Lau KM, Lazarus NH, Cochrane DE.	Related Articles, Links
	Expression of proinflammatory genes during estrogen-in inflammation of the rat prostate.	nduced

e fcg e ch

b e

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hg e e

Prostate. 2000 Jun 15;44(1):19-25. PMID: 10861753 [PubMed - indexed for MEDLINE] 306: Kikly KK, Bochner BS, Freeman SD, Tan KB, Gallagher KT. Related Articles, Links D'alessio KJ, Holmes SD, Abrahamson JA, Erickson-Miller CL, Murdock PR, Tachimoto H, Schleimer RP, White JR. Identification of SAF-2, a novel siglec expressed on eosinophils, mast cells, and basophils. J Allergy Clin Immunol. 2000 Jun; 105(6 Pt 1):1093-100. PMID: 10856141 [PubMed - indexed for MEDLINE] 307: Braunstahl GJ. Kleinjan A. Overbeek SE, Prins JB, Hoogsteden Related Articles, Links HC, Fokkens WJ Segmental bronchial provocation induces nasal inflammation in allergic rhinitis patients. Am J Respir Crit Care Med. 2000 Jun;161(6):2051-7. PMID: 10852787 [PubMed - indexed for MEDLINE] 308: Fukuyama S, Inoue H, Aizawa H, Oike M, Kitaura M, Yoshie O. Related Articles, Links Hara N. Effect of eotaxin and platelet-activating factor on airway inflammation and hyperresponsiveness in guinea pigs in vivo. Am J Respir Crit Care Med. 2000 Jun;161(6):1844-9. PMID: 10852755 [PubMed - indexed for MEDLINE] 309: Fine JS, Jackson JV, Rojas-Triana A, Bober LA. Related Articles, Links Evaluation of chemokine- and phlogistin-mediated leukocyte chemotaxis using an in vivo sponge model. Inflammation. 2000 Aug; 24(4):331-46. PMID: 10850855 [PubMed - indexed for MEDLINE] 310: Sampson AP. Related Articles, Links The role of eosinophils and neutrophils in inflammation. Clin Exp Allergy. 2000 Jun;30 Suppl 1:22-7. Review. PMID: 10849470 [PubMed - indexed for MEDLINE] 311: Hogan SP, Mishra A, Brandt EB, Foster PS, Rothenberg ME. Related Articles, Links A critical role for eotaxin in experimental oral antigen-induced eosinophilic gastrointestinal allergy. Proc Natl Acad Sci U S A. 2000 Jun 6;97(12):6681-6.

PMID: 10841566 [PubMed - indexed for MEDLINE]

312: Taha RA, Minshall EM, Leung DY, Boguniewicz M, Luster A. Related Articles, Links Muro S, Toda M, Hamid QA

Evidence for increased expression of eotaxin and monocyte chemotactic protein-4 in atopic dermatitis.

J Allergy Clin Immunol. 2000 May; 105(5):1002-7. PMID: 10808183 [PubMed - indexed for MEDLINE]

313. Yamada H, Yamaguchi M, Yamamoto K, Nakajima T, Hirai K, Related Articles, Links Morita Y, Sano Y, Yamada H.

Eotaxin in induced sputum of asthmatics: relationship with eosinophils and eosinophil cationic protein in sputum. Allergy. 2000 Apr;55(4):392-7.

PMID: 10782526 [PubMed - indexed for MEDLINE]

314: Winsor GL, Waterhouse CC, MacLellan RL, Stadnyk AW. Related Articles, Links

Interleukin-4 and IFN-gamma differentially stimulate macrophage chemoattractant protein-1 (MCP-1) and eotaxin production by intestinal

h

epithelial cells.

J Interferon Cytokine Res. 2000 Mar;20(3):299-308. PMID: 10762077 [PubMed - indexed for MEDLINE]

315: Giembycz MA.

Related Articles, Links

Phosphodiesterase 4 inhibitors and the treatment of asthma: where are we now and where do we go from here?

Drugs. 2000 Feb;59(2):193-212. Review.

PMID: 10730545 [PubMed - indexed for MEDLINE]

316: Nopp A, Lundahl J, Hallden G.

Related Articles, Links



Quantitative, rather than qualitative, differences in CD69 upregulation in human blood eosinophils upon activation with selected stimuli.

Allergy. 2000 Feb;55(2):148-56.

PMID: 10726729 [PubMed - indexed for MEDLINE]

317: Johnston CJ, Oberdorster G, Gelein R, Finkelstein JN.

Related Articles, Links



Newborn mice differ from adult mice in chemokine and cytokine expression to ozone, but not to endotoxin.

Inhal Toxicol. 2000 Mar;12(3):205-24.

PMID: 10715625 [PubMed - indexed for MEDLINE]

318: Elsner J, Mack M, Bruhl H, Dulkys Y, Kimmig D, Simmons G, Clapham PR, Schlondorff D, Kapp A, Wells TN, Proudfoot AE.

Related Articles, Links



Differential activation of CC chemokine receptors by AOP-RANTES.

J Biol Chem. 2000 Mar 17;275(11):7787-94.

PMID: 10713092 [PubMed - indexed for MEDLINE]

1319: Kampen GT, Stafford S, Adachi T, Jinquan T, Quan S, Grant JA, Related Articles, Links Skov PS, Poulsen LK, Alam R.



Eotaxin induces degranulation and chemotaxis of eosinophils through the activation of ERK2 and p38 mitogen-activated protein kinases.

Blood. 2000 Mar 15;95(6):1911-7.

PMID: 10706854 [PubMed - indexed for MEDLINE]

320: Braun MC, Lahey E, Kelsall BL.

Related Articles, Links



Selective suppression of IL-12 production by chemoattractants.

J Immunol. 2000 Mar 15;164(6):3009-17.

PMID: 10706689 [PubMed - indexed for MEDLINE]

321: Fernvik E, Lundahl J, Hallden G.

Related Articles, Links



The impact of eotaxin- and IL-5-induced adhesion and transmigration on eosinophil activity markers.

Inflammation. 2000 Feb;24(1):73-87.

PMID: 10704064 [PubMed - indexed for MEDLINE]

Terada N, Hamano N, Nomura T, Numata T, Hirai K, Nakajima Related Articles, Links T, Yamada H, Yoshie O, Ikeda-Ito T, Konno A.



Interleukin-13 and tumour necrosis factor-alpha synergistically induce eotaxin production in human nasal fibroblasts.

Clin Exp Allergy. 2000 Mar;30(3):348-55.

PMID: 10691892 [PubMed - indexed for MEDLINE]

323: Honda K, Chihara J.

Related Articles, Links



Eosinophil activation by eotaxin-eotaxin primes the production of reactive oxygen species from eosinophils.

Allergy. 1999 Dec;54(12):1262-9.

PMID: 10688429 [PubMed - indexed for MEDLINE]

Page 37 of 50 324: Dichmann S, Idzko M, Zimpfer U, Hofmann C, Ferrari D, Related Articles, Links Luttmann W, Virchow C Jr, Di Virgilio F, Norgauer J Adenosine triphosphate-induced oxygen radical production and CD11b up-regulation: Ca(++) mobilization and actin reorganization in human eosinophils. Blood. 2000 Feb 1;95(3):973-8. PMID: 10648411 [PubMed - indexed for MEDLINE] 325: Nibbs RJ, Salcedo TW, Campbell JD, Yao XT, Li Y, Nardelli B. Related Articles, Links Olsen HS, Morris TS, Proudfoot AE, Patel VP, Graham GJ. C-C chemokine receptor 3 antagonism by the beta-chemokine macrophage inflammatory protein 4, a property strongly enhanced by an aminoterminal alanine-methionine swap. J Immunol. 2000 Feb 1;164(3):1488-97. PMID: 10640766 [PubMed - indexed for MEDLINE] 326: Cho NH, Seong SY, Huh MS, Han TH, Koh YS, Choi MS, Kim Related Articles, Links IS. Expression of chemokine genes in murine macrophages infected with Orientia tsutsugamushi. Infect Immun. 2000 Feb;68(2):594-602. PMID: 10639422 [PubMed - indexed for MEDLINE] 327: Fujisawa T, Kato Y, Atsuta J, Terada A, Iguchi K, Kamiya H, Related Articles, Links Yamada H, Nakajima T, Miyamasu M, Hirai K. Chemokine production by the BEAS-2B human bronchial epithelial cells: differential regulation of eotaxin, IL-8, and RANTES by TH2- and TH1derived cytokines. J Allergy Clin Immunol. 2000 Jan; 105(1 Pt 1):126-33. PMID: 10629462 [PubMed - indexed for MEDLINE] 328: Campbell E, Kunkel SL, Strieter RM, Lukacs NW. Related Articles, Links Differential roles of IL-18 in allergic airway disease: induction of eotaxin by resident cell populations exacerbates eosinophil accumulation. J Immunol. 2000 Jan 15;164(2):1096-102. PMID: 10623861 [PubMed - indexed for MEDLINE] 329: Sato E, Simpson KL, Grisham MB, Koyama S, Robbins RA. Related Articles, Links Effects of reactive oxygen and nitrogen metabolites on eotaxin-induced eosinophil chemotactic activity in vitro. Am J Respir Cell Mol Biol. 2000 Jan;22(1):61-7. PMID: 10615066 [PubMed - indexed for MEDLINE] 330: Guo RF. Ward PA. Jordan JA, Huber-Lang M, Warner RL, Shi Related Articles, Links MMEotaxin expression in Sephadex-induced lung injury in rats. Am J Pathol. 1999 Dec; 155(6):2001-8. PMID: 10595930 [PubMed - indexed for MEDLINE] 331: Young SS, Ritacco G, Skeans S, Chapman RW. Related Articles, Links Eotaxin and nitric oxide production as markers of inflammation in allergic cynomolgus monkeys. Int Arch Allergy Immunol. 1999 Nov;120(3):209-17. PMID: 10592466 [PubMed - indexed for MEDLINE] 332: Ying S. Meng Q. Zeibecoglou K, Robinson DS, Macfarlane A.

Eosinophil chemotactic chemokines (eotaxin, eotaxin-2, RANTES,

monocyte chemoattractant protein-3 (MCP-3), and MCP-4), and C-C

Humbert M, Kay AB.

Related Articles, Links

chemokine receptor 3 expression in bronchial biopsies from atopic and nonatopic (Intrinsic) asthmatics. J Immunol. 1999 Dec 1;163(11):6321-9. PMID: 10570327 [PubMed - indexed for MEDLINE] 333: Jaffuel D, Mathieu M, Godard P, Michel FB, Demoly P. Related Articles, Links [Mechanism of action of glucocorticoids in asthma] Rev Mal Respir. 1999 Sep;16(4):431-42. Review. French. PMID: 10549054 [PubMed - indexed for MEDLINE] 334: Becker S, Soukup JM. Related Articles, Links Airway epithelial cell-induced activation of monocytes and eosinophils in respiratory syncytial viral infection. Immunobiology. 1999 Sep;201(1):88-106. PMID: 10532283 [PubMed - indexed for MEDLINE] 335: Honda K, Yamada Y, Cui C, Saito N, Kayaba H, Kobayashi Y, Related Articles, Links Oyamada H, Kamada Y, Kuwasaki T, Tsurufuji S, Chihara J. Effect of eotaxin on the generation of reactive oxygen species from eosinophil cell line, YY-1. Int Arch Allergy Immunol. 1999;120 Suppl 1:48-50. PMID: 10529604 [PubMed - indexed for MEDLINE] 1336: Oyamada H, Kamada Y, Kuwasaki T, Yamada Y, Kobayashi Y, Related Articles, Links Cui C, Honda K, Kavaba H, Saito N, Chihara J. CCR3 mRNA expression in bronchial epithelial cells and various cells in allergic inflammation. Int Arch Allergy Immunol. 1999;120 Suppl 1:45-7. PMID: 10529603 [PubMed - indexed for MEDLINE] 337: Mochizuki M, Schroder J, Christophers E, Yamamoto S. Related Articles, Links IL-4 induces eotaxin in human dermal fibroblasts. Int Arch Allergy Immunol. 1999;120 Suppl 1:19-23. Review. PMID: 10529597 [PubMed - indexed for MEDLINE] 1338: Fernyik E. Gronneberg R. Lundahl J. Raud J. Zetterstrom O. van Related Articles, Links Hage-Hamsten M, Hallden G. Characterization of eosinophils and detection of eotaxin in skin chamber fluid after challenge with relevant allergen in patients with mild asthma. Clin Exp Allergy. 1999 Nov;29(11):1516-25. PMID: 10520080 [PubMed - indexed for MEDLINE] 1339: Romagnani P, De Paulis A, Beltrame C, Annunziato F, Dente V. Related Articles, Links Maggi E, Romagnani S, Marone G. Tryptase-chymase double-positive human mast cells express the eotaxin receptor CCR3 and are attracted by CCR3-binding chemokines. Am J Pathol. 1999 Oct;155(4):1195-204. PMID: 10514402 [PubMed - indexed for MEDLINE] 340: Schroder JM, Mochizuki M. Related Articles, Links The role of chemokines in cutaneous allergic inflammation. Biol Chem. 1999 Jul-Aug; 380(7-8): 889-96. Review. PMID: 10494838 [PubMed - indexed for MEDLINE] 1341: Jundt F. Anagnostopoulos I, Bommert K, Emmerich F, Muller G. Related Articles, Links Foss HD, Rover HD, Stein H, Dorken B. Hodgkin/Reed-Sternberg cells induce fibroblasts to secrete eotaxin, a potent chemoattractant for T cells and eosinophils.

h cb hg e e e fcg e ch b e

Blood. 1999 Sep 15;94(6):2065-71.

PMID: 10477736 [PubMed - indexed for MEDLINE]

h

cb

h g

е

1 342: Harrington PM, Newton DJ, Williams CM, Hunt JA, Dearman RJ, Related Articles, Links Kimber I, Coleman JW, Flanagan BF. Eotaxin and eotaxin receptor (CCR3) expression in Sephadex particleinduced rat lung inflammation. Int J Exp Pathol. 1999 Jun;80(3):177-85. PMID: 10469273 [PubMed - indexed for MEDLINE] 343: Rajarathnam K, Crump MP, Clark-Lewis I, Sykes BD. Related Articles, Links Spectroscopic characterization of chemokines: relevance for quality control and standardization. Dev Biol Stand. 1999;97:49-57. PMID: 10463530 [PubMed - indexed for MEDLINE] 1344: Han SJ, Kim JH, Noh YJ, Chang HS, Kim CS, Kim KS, Ki SY. Related Articles, Links Park CS, Chung IY. Interleukin (IL)-5 downregulates tumor necrosis factor (TNF)-induced eotaxin messenger RNA (mRNA) expression in eosinophils. Induction of eotaxin mRNA by TNF and IL-5 in eosinophils. Am J Respir Cell Mol Biol. 1999 Sep;21(3):303-10. PMID: 10460747 [PubMed - indexed for MEDLINE] 345: Devouassoux G. Metcalfe DD. Prussin C. Related Articles, Links Eotaxin potentiates antigen-dependent basophil IL-4 production. J Immunol. 1999 Sep 1;163(5):2877-82. PMID: 10453034 [PubMed - indexed for MEDLINE] 1346: Lo D, Feng L, Li L, Carson MJ, Crowley M, Pauza M, Nguyen A, Related Articles, Links Reilly CR. Integrating innate and adaptive immunity in the whole animal. Immunol Rev. 1999 Jun;169:225-39. Review. PMID: 10450520 [PubMed - indexed for MEDLINE] 347: Campbell EM, Charo IF, Kunkel SL, Strieter RM, Boring L, Related Articles, Links Gosling J. Lukacs NW. Monocyte chemoattractant protein-1 mediates cockroach allergen-induced bronchial hyperreactivity in normal but not CCR2-/- mice: the role of mast J Immunol. 1999 Aug 15;163(4):2160-7. PMID: 10438957 [PubMed - indexed for MEDLINE] 1348: Ochi H. Hirani WM, Yuan O. Friend DS, Austen KF, Boyce JA. Related Articles, Links T helper cell type 2 cytokine-mediated comitogenic responses and CCR3 expression during differentiation of human mast cells in vitro. J Exp Med. 1999 Jul 19;190(2):267-80. PMID: 10432289 [PubMed - indexed for MEDLINE] 349: Gauvreau GM, Watson RM, O'Byrne PM. Related Articles, Links Kinetics of allergen-induced airway eosinophilic cytokine production and airway inflammation. Am J Respir Crit Care Med. 1999 Aug; 160(2):640-7. PMID: 10430741 [PubMed - indexed for MEDLINE] 350: Tedla N. Palladinetti P. Wakefield D. Lloyd A. Related Articles, Links Abundant expression of chemokines in malignant and infective human lymphadenopathies. Cytokine. 1999 Jul;11(7):531-40. PMID: 10419655 [PubMed - indexed for MEDLINE] 351: Yawalkar N, Uguccioni M, Scharer J, Braunwalder J, Karlen S, Related Articles, Links

e fcg

e ch

b e

Dewald B, Braathen LR, Baggiolini M.



Enhanced expression of eotaxin and CCR3 in atopic dermatitis.

J Invest Dermatol. 1999 Jul;113(1):43-8.

PMID: 10417617 [PubMed - indexed for MEDLINE]

352: Boehme SA, Sullivan SK, Crowe PD, Santos M, Conlon PJ, Sriramarao P, Bacon KB

Related Articles, Links



Activation of mitogen-activated protein kinase regulates eotaxin-induced eosinophil migration.

J Immunol. 1999 Aug 1;163(3):1611-8.

PMID: 10415066 [PubMed - indexed for MEDLINE]

353: Shinkai A, Yoshisue H, Koike M, Shoji E, Nakagawa S, Saito A. Related Articles, Links Takeda T, Imabeppu S, Kato Y, Hanai N, Anazawa H, Kuga T, Nishi T.



A novel human CC chemokine, eotaxin-3, which is expressed in IL-4-stimulated vascular endothelial cells, exhibits potent activity toward eosinophils.

J Immunol. 1999 Aug 1;163(3):1602-10.

PMID: 10415065 [PubMed - indexed for MEDLINE]

354: Jahnsen FL, Haye R, Gran E, Brandtzaeg P, Johansen FE.

Related Articles, Links



Glucocorticosteroids inhibit mRNA expression for eotaxin, eotaxin-2, and monocyte-chemotactic protein-4 in human airway inflammation with eosinophilia.

J Immunol. 1999 Aug 1;163(3):1545-51.

PMID: 10415058 [PubMed - indexed for MEDLINE]

355: Graziano FM, Cook EB, Stahl JL.

Related Articles, Links



Cytokines, chemokines, RANTES, and eotaxin.

Allergy Asthma Proc. 1999 May-Jun;20(3):141-6. Review.

PMID: 10389546 [PubMed - indexed for MEDLINE]

356: Ishihara Y, Kyono H, Kohyama N, Otaki N, Serita F, Tova T, Kagawa J. Related Articles, Links



Acute biological effects of intratracheally instilled titanium dioxide whiskers compared with nonfibrous titanium dioxide and amosite in rats. Inhal Toxicol. 1999 Feb;11(2):131-49.

PMID: 10380163 [PubMed - indexed for MEDLINE]

1357: Miyamasu M. Yamaguchi M. Nakajima T. Misaki Y. Morita Y. Related Articles, Links Matsushima K. Yamamoto K. Hirai K.



Th1-derived cytokine IFN-gamma is a potent inhibitor of eotaxin synthesis in vitro.

Int Immunol. 1999 Jun;11(6):1001-4.

PMID: 10360975 [PubMed - indexed for MEDLINE]

358: Hoshino M, Sim J, Shimizu K, Nakayama H, Koya A.

Related Articles, Links



Effect of AA-2414, a thromboxane A2 receptor antagonist, on airway inflammation in subjects with asthma.

J Allergy Clin Immunol. 1999 Jun;103(6):1054-61.

PMID: 10359886 [PubMed - indexed for MEDLINE]

1359: Ghaffar O, Hamid Q, Renzi PM, Allakhverdi Z, Molet S, Hogg JC, Shore SA, Luster AD, Lamkhioued B. Related Articles, Links



Constitutive and cytokine-stimulated expression of eotaxin by human airway smooth muscle cells.

Am J Respir Crit Care Med. 1999 Jun;159(6):1933-42. PMID: 10351942 [PubMed - indexed for MEDLINE]

h cb hg e e e fcg e ch b e

360: Nagai K, Larkin S, Hartnell A, Larbi K, Razi Aghakhani M, Related Articles, Links Windley C, Davies D, Lobb RR, Williams TJ, Nourshargh S. Human eotaxin induces eosinophil extravasation through rat mesenteric venules: role of alpha4 integrins and vascular cell adhesion molecule-1. Immunology. 1999 Feb;96(2):176-83. PMID: 10233693 [PubMed - indexed for MEDLINE] 361: Hogaboam CM, Gallinat CS, Taub DD, Strieter RM, Kunkel SL. Related Articles, Links Lukaes NW. Immunomodulatory role of C10 chemokine in a murine model of allergic bronchopulmonary aspergillosis. J Immunol. 1999 May 15;162(10):6071-9. PMID: 10229848 [PubMed - indexed for MEDLINE] 1362: Watson ML, White AM, Campbell EM, Smith AW, Uddin J, Related Articles, Links Yoshimura T, Westwick J. Anti-inflammatory actions of interleukin-13: suppression of tumor necrosis factor-alpha and antigen-induced leukocyte accumulation in the guinea pig lung. Am J Respir Cell Mol Biol. 1999 May;20(5):1007-12. PMID: 10226071 [PubMed - indexed for MEDLINE] 1363: Elsner J, Petering H, Kimmig D, Wells TN, Proudfoot AE, Kapp Related Articles, Links The CC chemokine receptor antagonist met-RANTES inhibits eosinophil effector functions. Int Arch Allergy Immunol. 1999 Feb-Apr;118(2-4):462-5. PMID: 10224475 [PubMed - indexed for MEDLINE] 364: Spergel JM, Mizoguchi E, Oettgen H, Bhan AK, Geha RS. Related Articles, Links Roles of TH1 and TH2 cytokines in a murine model of allergic dermatitis. J Clin Invest. 1999 Apr;103(8):1103-11. PMID: 10207161 [PubMed - indexed for MEDLINE] 365: Jinquan T, Quan S, Feili G, Larsen CG, Thestrup-Pedersen K. Related Articles, Links Eotaxin activates T cells to chemotaxis and adhesion only if induced to express CCR3 by IL-2 together with IL-4. J Immunol. 1999 Apr 1;162(7):4285-92. PMID: 10201960 [PubMed - indexed for MEDLINE] 366: Zhu Z, Homer RJ, Wang Z, Chen Q, Geba GP, Wang J, Zhang Y, Related Articles, Links Elias JA. Pulmonary expression of interleukin-13 causes inflammation, mucus hypersecretion, subepithelial fibrosis, physiologic abnormalities, and eotaxin production. J Clin Invest. 1999 Mar; 103(6):779-88. PMID: 10079098 [PubMed - indexed for MEDLINE] 367: Sabroe I, Hartnell A, Jopling LA, Bel S, Ponath PD, Pease JE, Collins PD, Williams TJ.

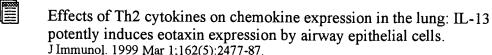
Related Articles, Links

Differential regulation of eosinophil chemokine signaling via CCR3 and non-CCR3 pathways.

J Immunol. 1999 Mar 1;162(5):2946-55.

PMID: 10072545 [PubMed - indexed for MEDLINE]

368: Li L, Xia Y, Nguyen A, Lai YH, Feng L, Mosmann TR, Lo D. Related Articles, Links



h cb h g e fcg e ch b e

Related Articles, Links

PMID: 10072486 [PubMed - indexed for MEDLINE] 369: Taha RA, Minshall EM, Miotto D, Shimbara A, Luster A, Hogg Related Articles, Links JC, Hamid OA. Eotaxin and monocyte chemotactic protein-4 mRNA expression in small airways of asthmatic and nonasthmatic individuals. J Allergy Clin Immunol. 1999 Mar; 103(3 Pt 1): 476-83. PMID: 10069883 [PubMed - indexed for MEDLINE] 370: Kohyama T, Takizawa H, Kawasaki S, Akiyama N, Sato M, Ito Related Articles, Links K, Yamamoto K. A potent immunosuppressant FK506 inhibits IL-8 expression in human eosinophils. Mol Cell Biol Res Commun. 1999 Apr;1(1):72-7. PMID: 10329481 [PubMed - indexed for MEDLINE] 371: Johnston CJ, Finkelstein JN, Gelein R, Oberdorster G. Related Articles, Links Pulmonary cytokine and chemokine mRNA levels after inhalation of lipopolysaccharide in C57BL/6 mice. Toxicol Sci. 1998 Dec;46(2):300-7. PMID: 10048133 [PubMed - indexed for MEDLINE] 372: MacLean JA, Sauty A, Luster AD, Drazen JM, De Sanctis GT. Related Articles, Links Antigen-induced airway hyperresponsiveness, pulmonary eosinophilia, and chemokine expression in B cell-deficient mice. Am J Respir Cell Mol Biol. 1999 Mar; 20(3):379-87. PMID: 10030835 [PubMed - indexed for MEDLINE] 1 373: Johnston CJ, Finkelstein JN, Oberdorster G, Reynolds SD, Stripp Related Articles, Links BR. Clara cell secretory protein-deficient mice differ from wild-type mice in inflammatory chemokine expression to oxygen and ozone, but not to endotoxin. Exp Lung Res. 1999 Jan-Feb;25(1):7-21. PMID: 10027076 [PubMed - indexed for MEDLINE] 1 374: Le Gros G, Erb K, Harris N, Holloway J, McCoy K, Ronchese F. Related Articles, Links Immunoregulatory networks in asthma. Clin Exp Allergy. 1998 Nov;28 Suppl 5:92-6; discussion 117-8. Review. PMID: 9988453 [PubMed - indexed for MEDLINE] 375: Petering H, Gotze O, Kimmig D, Smolarski R, Kapp A, Elsner J. Related Articles, Links The biologic role of interleukin-8: functional analysis and expression of CXCR1 and CXCR2 on human eosinophils. Blood. 1999 Jan 15;93(2):694-702. PMID: 9885232 [PubMed - indexed for MEDLINE] 376: Campbell EM, Kunkel SL, Strieter RM, Lukacs NW. Related Articles, Links Temporal role of chemokines in a murine model of cockroach allergeninduced airway hyperreactivity and eosinophilia. J Immunol. 1998 Dec 15;161(12):7047-53. PMID: 9862742 [PubMed - indexed for MEDLINE] 377: Wedi B, Raap U, Lewrick H, Kapp A. Related Articles, Links IL-4-induced apoptosis in peripheral blood eosinophils. J Allergy Clin Immunol. 1998 Dec; 102(6 Pt 1):1013-20. PMID: 9847443 [PubMed - indexed for MEDLINE]

Hogaboam CM, Gallinat CS, Bone-Larson C, Chensue SW

□ 378:

h

Lukacs NW, Strieter RM, Kunkel SL



Collagen deposition in a non-fibrotic lung granuloma model after nitric oxide inhibition.

Am J Pathol. 1998 Dec; 153(6):1861-72.

PMID: 9846976 [PubMed - indexed for MEDLINE]

379: Sabroe I, Conroy DM, Gerard NP, Li Y, Collins PD, Post TW, Related Articles, Links Jose P.J. Williams T.J. Gerard C.J. Ponath P.D.



Cloning and characterization of the guinea pig eosinophil eotaxin receptor, C-C chemokine receptor-3: blockade using a monoclonal antibody in vivo. J Immunol. 1998 Dec 1;161(11):6139-47.

PMID: 9834099 [PubMed - indexed for MEDLINE]

380: Yang Y. Loy J. Ryseck RP, Carrasco D. Bravo R.

Related Articles, Links



Antigen-induced eosinophilic lung inflammation develops in mice deficient in chemokine eotaxin.

Blood. 1998 Nov 15;92(10):3912-23.

PMID: 9808585 [PubMed - indexed for MEDLINE]

381: Yang L. Cohn L, Zhang DH, Homer R, Ray A, Ray P.

Related Articles, Links



Essential role of nuclear factor kappaB in the induction of eosinophilia in allergic airway inflammation.

J Exp Med. 1998 Nov 2;188(9):1739-50.

PMID: 9802985 [PubMed - indexed for MEDLINE]

382: Cook EB, Stahl JL, Graziano FM

Related Articles, Links



Eotaxin: what we know, and what we would like to know.

Allergy Asthma Proc. 1998 Sep-Oct;19(5):253-5. Review. No abstract available.

PMID: 9801737 [PubMed - indexed for MEDLINE]

1383: Hogan SP, Mould AW, Young JM, Rothenberg ME, Ramsay AJ. Related Articles, Links Matthaei K, Young IG, Foster PS.



Cellular and molecular regulation of eosinophil trafficking to the lung. Immunol Cell Biol. 1998 Oct;76(5):454-60.

PMID: 9797467 [PubMed - indexed for MEDLINE]

384: Perretti M.

Related Articles, Links



Lipocortin 1 and chemokine modulation of granulocyte and monocyte accumulation in experimental inflammation.

Gen Pharmacol. 1998 Oct;31(4):545-52. Review. PMID: 9792213 [PubMed - indexed for MEDLINE]

385: El-Shazly A, Masuyama K, Nakano K, Eura M, Samejima Y, Ishikawa T.

Related Articles, Links -



Human eotaxin induces eosinophil-derived neurotoxin release from normal human eosinophils.

Int Arch Allergy Immunol. 1998 Sep;117 Suppl 1:55-8. PMID: 9758899 [PubMed - indexed for MEDLINE]

386: Li L, Xia Y, Nguyen A, Feng L, Lo D.

Related Articles, Links



Th2-induced eotaxin expression and eosinophilia coexist with Th1 responses at the effector stage of lung inflammation.

J Immunol. 1998 Sep 15;161(6):3128-35.

PMID: 9743380 [PubMed - indexed for MEDLINE]

1387: Nakajima T, Yamada H, Iikura M, Miyamasu M, Izumi S, Shida Related Articles, Links H, Ohta K, Imai T, Yoshie O, Mochizuki M, Schroder JM, Morita Y, Yamamoto K, Hirai K

Intracellular localization and release of eotaxin from normal eosinophils.

FEBS Lett. 1998 Sep 4;434(3):226-30.

PMID: 9742928 [PubMed - indexed for MEDLINE]

1 388: Wang J, Palmer K, Lotvall J, Milan S, Lei XF, Matthaei KI, Gauldie J, Inman MD, Jordana M, Xing Z.

Related Articles, Links



Circulating, but not local lung, IL-5 is required for the development of antigen-induced airways eosinophilia.

J Clin Invest. 1998 Sep 15;102(6):1132-41.

PMID: 9739047 [PubMed - indexed for MEDLINE]

389: Quackenbush EJ, Wershil BK, Aguirre V, Gutierrez-Ramos JC. Related Articles, Links



Eotaxin modulates myelopoiesis and mast cell development from embryonic hematopoietic progenitors.

Blood. 1998 Sep 15;92(6):1887-97.

PMID: 9731045 [PubMed - indexed for MEDLINE]

390: Teixeira MM, Hellewell PG.

Related Articles, Links



Contribution of endothelial selectins and alpha 4 integrins to eosinophil trafficking in allergic and nonallergic inflammatory reactions in skin. J Immunol. 1998 Sep 1;161(5):2516-23.

PMID: 9725251 [PubMed - indexed for MEDLINE]

391: Crump MP, Rajarathnam K, Kim KS, Clark-Lewis I, Sykes BD. Related Articles, Links



Solution structure of eotaxin, a chemokine that selectively recruits eosinophils in allergic inflammation.

J Biol Chem. 1998 Aug 28;273(35):22471-9.

PMID: 9712872 [PubMed - indexed for MEDLINE]

1 392: Evans CA, Garcia HH, Hartnell A, Gilman RH, Jose PJ, Martinez Related Articles, Links M, Remick DG, Williams TJ, Friedland JS.



Elevated concentrations of eotaxin and interleukin-5 in human neurocysticercosis.

Infect Immun. 1998 Sep;66(9):4522-5.

PMID: 9712812 [PubMed - indexed for MEDLINE]

393: Teixeira MM, Williams TJ, Hellewell PG.

Related Articles, Links



Description of an in vivo model for the assessment of eosinophil chemoattractants in the mouse.

Mem Inst Oswaldo Cruz. 1997;92 Suppl 2:211-4. PMID: 9698936 [PubMed - indexed for MEDLINE]

394: Conroy DM, Humbles AA, Rankin SM, Palframan RT, Collins PD, Griffiths-Johnson DA, Jose PJ, Williams TJ.

Related Articles, Links



The role of the eosinophil-selective chemokine, eotaxin, in allergic and non-allergic airways inflammation.

Mem Inst Oswaldo Cruz. 1997;92 Suppl 2:183-91. Review. PMID: 9698931 [PubMed - indexed for MEDLINE]

395: Pease JE, Wang J. Ponath PD, Murphy PM.

Related Articles, Links



The N-terminal extracellular segments of the chemokine receptors CCR1 and CCR3 are determinants for MIP-1alpha and eotaxin binding, respectively, but a second domain is essential for efficient receptor activation.

J Biol Chem. 1998 Aug 7;273(32):19972-6.

PMID: 9685332 [PubMed - indexed for MEDLINE]

T 396: Gonzalo JA, Lloyd CM, Wen D, Alber JP, Wells TN, Proudfoot A, Martinez-A C, Dorf M, Bjerke T, Coyle AJ, Gutierrez-Ramos JC

h

cb hg e e fcg

e ch

b e



The coordinated action of CC chemokines in the lung orchestrates allergic inflammation and airway hyperresponsiveness.

J Exp Med. 1998 Jul 6;188(1):157-67.

PMID: 9653092 [PubMed - indexed for MEDLINE]

397: Kraneveld AD, Folkerts G, Van Oosterhout AJ, Nijkamp FP. Related Articles, Links



Airway hyperresponsiveness: first eosinophils and then neuropeptides.

Int J Immunopharmacol. 1997 Sep-Oct;19(9-10):517-27. Review.

PMID: 9637348 [PubMed - indexed for MEDLINE]

398: Matthews AN, Friend DS, Zimmermann N, Sarafi MN, Luster AD, Pearlman E, Wert SE, Rothenberg ME.

Related Articles, Links



Eotaxin is required for the baseline level of tissue eosinophils.

Proc Natl Acad Sci U S A. 1998 May 26;95(11):6273-8.

PMID: 9600955 [PubMed - indexed for MEDLINE]

399: Tang H, Sharp GC, Peterson KP, Braley-Mullen H.

Related Articles, Links



IFN-gamma-deficient mice develop severe granulomatous experimental autoimmune thyroiditis with eosinophil infiltration in thyroids.

J Immunol. 1998 May 15;160(10):5105-12.

PMID: 9590262 [PubMed - indexed for MEDLINE]

400: Lundahl J, Moshfegh A, Gronneberg R, Hallden G.

Related Articles, Links



Eotaxin increases the expression of CD11b/CD18 and adhesion properties in IL5, but not fMLP-prestimulated human peripheral blood eosinophils. Inflammation. 1998 Apr;22(2):123-35.

PMID: 9561923 [PubMed - indexed for MEDLINE]

401: Mochizuki M, Bartels J, Mallet AI, Christophers E, Schroder JM. Related Articles, Links



IL-4 induces eotaxin: a possible mechanism of selective eosinophil recruitment in helminth infection and atopy.

J Immunol. 1998 Jan 1;160(1):60-8.

PMID: 9551956 [PubMed - indexed for MEDLINE]

402: Alcami A, Symons JA, Collins PD, Williams TJ, Smith GL.

Related Articles, Links



Blockade of chemokine activity by a soluble chemokine binding protein from vaccinia virus.

J Immunol. 1998 Jan 15;160(2):624-33.

PMID: 9551896 [PubMed - indexed for MEDLINE]

403: Palframan RT, Collins PD, Williams TJ, Rankin SM.

Related Articles, Links



Eotaxin induces a rapid release of eosinophils and their progenitors from the bone marrow.

Blood. 1998 Apr 1;91(7):2240-8.

PMID: 9516121 [PubMed - indexed for MEDLINE]

404: Peled A, Gonzalo JA, Lloyd C, Gutierrez-Ramos JC.

Related Articles, Links



The chemotactic cytokine eotaxin acts as a granulocyte-macrophage colony-stimulating factor during lung inflammation.

Blood. 1998 Mar 15;91(6):1909-16.

PMID: 9490673 [PubMed - indexed for MEDLINE]

405: Gerber BO, Zanni MP, Uguccioni M, Loetscher M, Mackay CR. Related Articles, Links Pichler WJ, Yawalkar N, Baggiolini M, Moser B.



Functional expression of the eotaxin receptor CCR3 in T lymphocytes colocalizing with eosinophils.

Curr Biol. 1997 Nov 1;7(11):836-43.

PMID: 9480044 [PubMed - indexed for MEDLINE]

406: Ying S, Robinson DS, Meng Q, Rottman J, Kennedy R, Ringler Related Articles, Links DJ, Mackay CR, Daugherty BL, Springer MS, Durham SR, Williams TJ, Kay AB. Enhanced expression of eotaxin and CCR3 mRNA and protein in atopic asthma. Association with airway hyperresponsiveness and predominant co-localization of eotaxin mRNA to bronchial epithelial and endothelial Eur J Immunol. 1997 Dec;27(12):3507-16. PMID: 9464841 [PubMed - indexed for MEDLINE] 1 407: Ishi Y, Shirato M, Nomura A, Sakamoto T, Uchida Y, Ohtsuka M, Related Articles, Links Sagai M, Hasegawa S. Cloning of rat eotaxin: ozone inhalation increases mRNA and protein expression in lungs of brown Norway rats. Am J Physiol. 1998 Jan; 274(1 Pt 1):L171-6. PMID: 9458816 [PubMed - indexed for MEDLINE] 408: Minshall EM, Cameron L. Lavigne F, Leung DY, Hamilos D. Related Articles, Links Garcia-Zepada EA, Rothenberg M, Luster AD, Hamid O. Eotaxin mRNA and protein expression in chronic sinusitis and allergeninduced nasal responses in seasonal allergic rhinitis. Am J Respir Cell Mol Biol. 1997 Dec;17(6):683-90. PMID: 9409555 [PubMed - indexed for MEDLINE] 1 409: Elsner J, Petering H, Hochstetter R, Kimmig D, Wells TN, Kapp Related Articles, Links A. Proudfoot AE The CC chemokine antagonist Met-RANTES inhibits eosinophil effector functions through the chemokine receptors CCR1 and CCR3. Eur J Immunol. 1997 Nov;27(11):2892-8. PMID: 9394815 [PubMed - indexed for MEDLINE] 410: Tenscher K, Metzner B, Hofmann C, Schopf E, Norgauer J. Related Articles, Links The monocyte chemotactic protein-4 induces oxygen radical production. actin reorganization, and CD11b up-regulation via a pertussis toxinsensitive G-protein in human eosinophils. Biochem Biophys Res Commun. 1997 Nov 7;240(1):32-5. PMID: 9367876 [PubMed - indexed for MEDLINE] 411: Quackenbush EJ, Aguirre V, Wershil BK, Gutierrez-Ramos JC. Related Articles, Links Eotaxin influences the development of embryonic hematopoietic progenitors in the mouse. J Leukoc Biol. 1997 Nov;62(5):661-6. PMID: 9365121 [PubMed - indexed for MEDLINE] 412: Luster AD, Rothenberg ME. Related Articles, Links Role of the monocyte chemoattractant protein and eotaxin subfamily of chemokines in allergic inflammation. J Leukoc Biol. 1997 Nov;62(5):620-33. Review. PMID: 9365117 [PubMed - indexed for MEDLINE] 413: Griffiths-Johnson DA, Collins PD, Jose PJ, Williams TJ. Related Articles, Links Animal models of asthma: role of chemokines. Methods Enzymol. 1997;288:241-66. PMID: 9356998 [PubMed - indexed for MEDLINE] 414: Dairaghi DJ, Oldham ER, Bacon KB, Schall TJ. Related Articles, Links Chemokine receptor CCR3 function is highly dependent on local pH and

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J Biol Chem. 1997 Nov 7;272(45):28206-9. PMID: 9353270 [PubMed - indexed for MEDLINE] 415: Lamkhioued B, Renzi PM, Abi-Younes S, Garcia-Zepada EA, Related Articles, Links Allakhverdi Z, Ghaffar O, Rothenberg MD, Luster AD, Hamid Q. Increased expression of eotaxin in bronchoalveolar lavage and airways of asthmatics contributes to the chemotaxis of eosinophils to the site of inflammation. J Immunol. 1997 Nov 1;159(9):4593-601. PMID: 9379061 [PubMed - indexed for MEDLINE] 416: Chensue SW, Warmington K, Ruth JH, Lukaes N, Kunkel SL. Related Articles, Links Mycobacterial and schistosomal antigen-elicited granuloma formation in IFN-gamma and IL-4 knockout mice: analysis of local and regional cytokine and chemokine networks. J Immunol. 1997 Oct 1;159(7):3565-73. Erratum in: J Immunol 1999 Mar 1;162(5):3106. PMID: 9317156 [PubMed - indexed for MEDLINE] 417: Teixeira MM, Wells TN, Lukaes NW, Proudfoot AE, Kunkel SL, Related Articles, Links Williams TJ. Hellewell PG. Chemokine-induced eosinophil recruitment. Evidence of a role for endogenous eotaxin in an in vivo allergy model in mouse skin. J Clin Invest. 1997 Oct 1;100(7):1657-66. PMID: 9312163 [PubMed - indexed for MEDLINE] 418: Uguccioni M, Mackay CR, Ochensberger B, Loetscher P, Rhis S. Related Articles, Links LaRosa GJ, Rao P, Ponath PD, Baggiolini M, Dahinden CA. High expression of the chemokine receptor CCR3 in human blood basophils. Role in activation by eotaxin, MCP-4, and other chemokines. J Clin Invest. 1997 Sep 1;100(5):1137-43. PMID: 9276730 [PubMed - indexed for MEDLINE] 419: Das AM, Flower RJ, Perretti M. Related Articles, Links Eotaxin-induced eosinophil migration in the peritoneal cavity of ovalbumin-sensitized mice: mechanism of action. J Immunol. 1997 Aug 1;159(3):1466-73. PMID: 9233645 [PubMed - indexed for MEDLINE] 420: Mattoli S, Stacey MA, Sun G, Bellini A, Marini M. Related Articles, Links Eotaxin expression and eosinophilic inflammation in asthma. Biochem Biophys Res Commun. 1997 Jul 18;236(2):299-301. PMID: 9240429 [PubMed - indexed for MEDLINE] 421: Santamaria LF, Palacios JM, Beleta J. Related Articles, Links Inhibition of eotaxin-mediated human eosinophil activation and migration by the selective cyclic nucleotide phosphodiesterase type 4 inhibitor rolipram. Br J Pharmacol. 1997 Jul;121(6):1150-4. PMID: 9249251 [PubMed - indexed for MEDLINE] 422: Krzesicki RF, Winterrowd GE, Brashler JR, Hatfield CA, Griffin Related Articles, Links RL, Fidler SF, Kolbasa KP, Shull KL, Richards IM, Chin JE. Identification of cytokine and adhesion molecule mRNA in murine lung tissue and isolated T cells and eosinophils by semi-quantitative reverse transcriptase-polymerase chain reaction. Am J Respir Cell Mol Biol. 1997 Jun;16(6):693-701. PMID: 9191471 [PubMed - indexed for MEDLINE]

Izumi S, Hirai K, Miyamasu M, Takahashi Y, Misaki Y, Takaishi

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423: T. Morita Y. Matsushima K. Ida N. Nakamura H. Kasahara T. Ito Related Articles, Links Expression and regulation of monocyte chemoattractant protein-1 by human eosinophils. Eur J Immunol. 1997 Apr;27(4):816-24. PMID: 9130630 [PubMed - indexed for MEDLINE] 424: Van Coillie E, Fiten P, Nomiyama H, Sakaki Y, Miura R, Yoshie Related Articles, Links O, Van Damme J, Opdenakker G. The human MCP-2 gene (SCYA8): cloning, sequence analysis, tissue expression, and assignment to the CC chemokine gene contig on chromosome 17q11.2. Genomics. 1997 Mar 1;40(2):323-31. PMID: 9119400 [PubMed - indexed for MEDLINE] 425: Mould AW, Matthaei KI, Young IG, Foster PS. Related Articles, Links Relationship between interleukin-5 and eotaxin in regulating blood and tissue eosinophilia in mice. J Clin Invest. 1997 Mar 1;99(5):1064-71. PMID: 9062365 [PubMed - indexed for MEDLINE] 426: Rothenberg ME, MacLean JA, Pearlman E, Luster AD, Leder P. Related Articles, Links Targeted disruption of the chemokine eotaxin partially reduces antigeninduced tissue eosinophilia. JExp Med. 1997 Feb 17; 185(4):785-90. PMID: 9034156 [PubMed - indexed for MEDLINE] 427: Yamada H, Hirai K, Miyamasu M, Iikura M, Misaki Y, Shoji S. Related Articles, Links Takaishi T, Kasahara T, Morita Y, Ito K. Eotaxin is a potent chemotaxin for human basophils. Biochem Biophys Res Commun. 1997 Feb 13;231(2):365-8. PMID: 9070280 [PubMed - indexed for MEDLINE] 1 428: Heath H, Qin S, Rao P, Wu L, LaRosa G, Kassam N, Ponath PD, Related Articles, Links Mackay CR. Chemokine receptor usage by human eosinophils. The importance of CCR3 demonstrated using an antagonistic monoclonal antibody. J Clin Invest. 1997 Jan 15;99(2):178-84. PMID: 9005985 [PubMed - indexed for MEDLINE] 1 429: Pearlman E, Lass JH, Bardenstein DS, Diaconu E, Hazlett FE Jr. Related Articles, Links Albright J. Higgins AW, Kazura JW. IL-12 exacerbates helminth-mediated corneal pathology by augmenting inflammatory cell recruitment and chemokine expression. J Immunol. 1997 Jan 15;158(2):827-33. PMID: 8993000 [PubMed - indexed for MEDLINE] 430: Garcia-Zepeda EA, Combadiere C, Rothenberg ME, Sarafi MN. Related Articles, Links Lavigne F. Hamid O. Murphy PM, Luster AD. Human monocyte chemoattractant protein (MCP)-4 is a novel CC chemokine with activities on monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3. J Immunol. 1996 Dec 15;157(12):5613-26. PMID: 8955214 [PubMed - indexed for MEDLINE] 431: Gonzalo JA, Lloyd CM, Kremer L, Finger E, Martinez-A C, Related Articles, Links Siegelman MH, Cybulsky M, Gutierrez-Ramos JC. Eosinophil recruitment to the lung in a murine model of allergic

inflammation. The role of T cells, chemokines, and adhesion receptors. J Clin Invest. 1996 Nov 15;98(10):2332-45. PMID: 8941651 [PubMed - indexed for MEDLINE] 432: Jia GO, Gonzalo JA, Lloyd C, Kremer L, Lu L, Martinez-A C. Related Articles, Links Wershil BK, Gutierrez-Ramos JC. Distinct expression and function of the novel mouse chemokine monocyte chemotactic protein-5 in lung allergic inflammation. J Exp Med. 1996 Nov 1;184(5):1939-51. PMID: 8920881 [PubMed - indexed for MEDLINE] 433: Tenscher K, Metzner B, Schopf E, Norgauer J, Czech W. Related Articles, Links Recombinant human eotaxin induces oxygen radical production, Ca(2+)mobilization, actin reorganization, and CD11b upregulation in human eosinophils via a pertussis toxin-sensitive heterotrimeric guanine nucleotide-binding protein. Blood. 1996 Oct 15;88(8):3195-9. PMID: 8874220 [PubMed - indexed for MEDLINE] 434: Elsner J. Hochstetter R, Kimmig D, Kapp A. Related Articles, Links Human eotaxin represents a potent activator of the respiratory burst of human eosinophils. Eur J Immunol. 1996 Aug;26(8):1919-25. PMID: 8765040 [PubMed - indexed for MEDLINE] 435: Gura T. Related Articles, Links Chemokines take center stage in inflammatory ills. Science. 1996 May 17;272(5264):954-6. No abstract available. PMID: 8638140 [PubMed - indexed for MEDLINE] 1 436: Daugherty BL, Siciliano SJ, DeMartino JA, Malkowitz L, Sirotina Related Articles, Links A. Springer MS. Cloning, expression, and characterization of the human eosinophil eotaxin receptor. J Exp Med. 1996 May 1;183(5):2349-54. PMID: 8642344 [PubMed - indexed for MEDLINE] 17 437: Kitaura M, Nakajima T, Imai T, Harada S, Combadiere C, Tiffany Related Articles, Links HL, Murphy PM, Yoshie O Molecular cloning of human eotaxin, an eosinophil-selective CC chemokine, and identification of a specific eosinophil eotaxin receptor, CC chemokine receptor 3. J Biol Chem. 1996 Mar 29;271(13):7725-30. PMID: 8631813 [PubMed - indexed for MEDLINE] ☐ 438: Baggiolini M. Related Articles, Links Eotaxin: a VIC (very important chemokine) of allergic inflammation? J Clin Invest. 1996 Feb 1;97(3):587. No abstract available. PMID: 8609209 [PubMed - indexed for MEDLINE] 1 439: Ganzalo JA, Jia GO, Aguirre V, Friend D, Coyle AJ, Jenkins NA, Related Articles, Links Lin GS, Katz H, Lichtman A, Copeland N, Kopf M, Gutierrez-Ramos JC. Mouse Eotaxin expression parallels eosinophil accumulation during lung = allergic inflammation but it is not restricted to a Th2-type response. Immunity. 1996 Jan;4(1):1-14. PMID: 8574847 [PubMed - indexed for MEDLINE] 440: Post TW, Bozic CR, Rothenberg ME, Luster AD, Gerard N. Related Articles, Links Gerard C.



Molecular characterization of two murine eosinophil beta chemokine receptors.

J Immunol. 1995 Dec 1;155(11):5299-305.

PMID: 7594543 [PubMed - indexed for MEDLINE]

441: Rothenberg ME, Luster AD, Lilly CM, Drazen JM, Leder P.

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Constitutive and allergen-induced expression of eotaxin mRNA in the guinea pig lung.

J Exp Med. 1995 Mar 1;181(3):1211-6.

PMID: 7869037 [PubMed - indexed for MEDLINE]

1 442: <u>Jose PJ, Griffiths-Johnson DA, Collins PD, Walsh DT, Moqbel R.</u> Related Articles, Links Totty NF, Truong O, Hsuan JJ, Williams TJ.



Eotaxin: a potent eosinophil chemoattractant cytokine detected in a guinea pig model of allergic airways inflammation.

J Exp Med. 1994 Mar 1;179(3):881-7.

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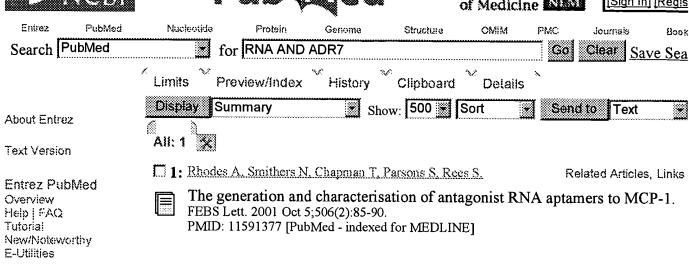
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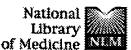
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1 2: Kataoka C. Egashira K. Ishibashi M. Inoue S. Ni W. Hiasa K. Kitamoto S. Usui M. Takeshita A.

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2: Morgan T, Anderson A.

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3: Morgan TO, Anderson A, Bertram D.

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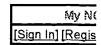
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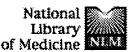
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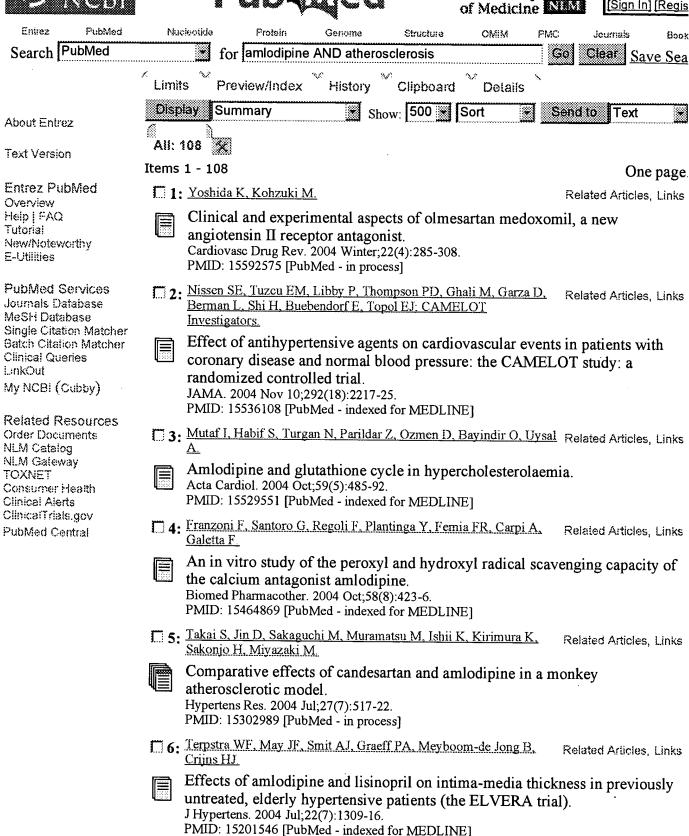
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7: Yamagishi S, Inagaki Y, Nakamura K, Imaizumi T.

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J Cardiovasc Pharmacol. 2004 May;43(5):724-30. PMID: 15071361 [PubMed - indexed for MEDLINE] 8: Yamaguchi T, Ida T, Hiraga M, Oishi K, Uchida MK, Echizen H. Related Articles, Links [Effects of angiotensin II receptor blockers, angiotensin converting enzyme inhibitors, 3-hydroxy-3-methyl glutaryl (HMG) CoA reductase inhibitors, amlodipine and epalrestat on cultured basilar artery smooth muscle cell proliferation] Yakugaku Zasshi. 2004 Mar;124(3):159-63. Japanese. PMID: 15049134 [PubMed - indexed for MEDLINE] 9: Candido R. Allen TJ, Lassila M, Cao Z, Thallas V, Cooper ME. Related Articles, Links Jandeleit-Dahm KA Irbesartan but not amlodipine suppresses diabetes-associated atherosclerosis. Circulation. 2004 Mar 30;109(12):1536-42. Epub 2004 Mar 15. PMID: 15023892 [PubMed - indexed for MEDLINE] 10: Jukema JW, van der Hoom JW. Related Articles, Links Amlodipine and atorvastatin in atherosclerosis: a review of the potential of combination therapy. Expert Opin Pharmacother. 2004 Feb;5(2):459-68. Review. PMID: 14996641 [PubMed - indexed for MEDLINE] 11: Biswas TK. Related Articles, Links Endothelium, atherosclerosis and calcium channel blockers. J Indian Med Assoc. 2003 Jul; 101(7):428-31. PMID: 14748381 [PubMed - indexed for MEDLINE] 12: Scholze JE. Related Articles, Links [Differential therapy with calcium antagonists] Herz. 2003 Dec;28(8):754-63. Review. German. PMID: 14689111 [PubMed - indexed for MEDLINE] 13: Yamaguchi T, Oishi K, Uchida M, Echizen H. Related Articles, Links Edaravone, a radical scavenger, may enhance or produce antiproliferative effects of fluvastatin, amlodipine, ozagrel, GF109203X and Y27632 on cultured basilar artery smooth muscle cells. Biol Pharm Bull. 2003 Dec;26(12):1706-10. PMID: 14646175 [PubMed - indexed for MEDLINE] 14: Hernandez RH, Armas-Hernandez MJ, Velasco M, Israili ZH. Related Articles, Links Armas-Padilla MC. Calcium antagonists and atherosclerosis protection in hypertension. Am J Ther. 2003 Nov-Dec;10(6):409-14. Review. PMID: 14624278 [PubMed - indexed for MEDLINE] 15: Jermendy G. Related Articles, Links [Is type-2 diabetes mellitus preventable?] Orv Hetil. 2003 Sep 28;144(39):1909-17. Review. Hungarian. PMID: 14598569 [PubMed - indexed for MEDLINE] 16: Kataoka C, Egashira K, Ishibashi M, Inoue S, Ni W, Hiasa K. Related Articles, Links Kitamoto S. Usui M. Takeshita A Novel anti-inflammatory actions of amlodipine in a rat model of arteriosclerosis induced by long-term inhibition of nitric oxide synthesis. Am J Physiol Heart Circ Physiol. 2004 Feb; 286(2): H768-74. Epub 2003 Oct 30. PMID: 14592942 [PubMed - indexed for MEDLINE]

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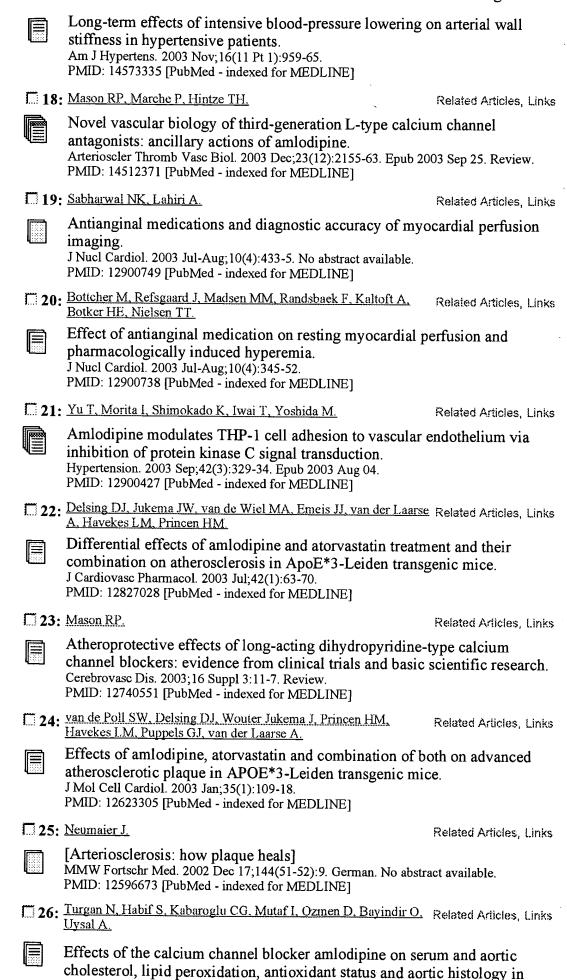
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cholesterol-fed rabbits. J Biomed Sci. 2003 Jan-Feb; 10(1):65-72. PMID: 12566988 [PubMed - indexed for MEDLINE] 27: [No authors listed] Related Articles, Links [Calcium antagonist against hypertension. Arteriosclerosis controlled] MMW Fortschr Med. 2002 Oct 17;144(42):63. German. No abstract available. PMID: 12534002 [PubMed - indexed for MEDLINE] 28: Sidorenko BA, Stetsenko TM, Preobrazhenskii DV, Savchenko Related Articles, Links MV, Soplevenko AV, Shabaeva EN [Third generation of calcium antagonists: focus on lacidipine] Kardiologiia. 2002;42(12):81-90. Review. Russian. PMID: 12494025 [PubMed - indexed for MEDLINE] **29:** Mason RP. Related Articles, Links Mechanisms of plaque stabilization for the dihydropyridine calcium channel blocker amlodipine: review of the evidence. Atherosclerosis. 2002 Dec;165(2):191-9. Review. PMID: 12417269 [PubMed - indexed for MEDLINE] 30: Deanfield JE. Related Articles, Links Targeting the atherosclerotic process in clinical practice. A new look at established agents. Atherosclerosis. 2002 Dec;165(2):189-90. No abstract available. PMID: 12417268 [PubMed - indexed for MEDLINE] 31: Nebe B, Holzhausen C, Rychly J, Urbaszek W. Related Articles, Links Impaired mechanisms of leukocyte adhesion in vitro by the calcium channel antagonist mibefradil. Cardiovasc Drugs Ther. 2002 May; 16(3):183-93. PMID: 12374895 [PubMed - indexed for MEDLINE] 32: Mancini GB, Pitt B. Related Articles, Links Coronary angiographic changes in patients with cardiac events in the Prospective Randomized Evaluation of the Vascular Effects of Norvasc Trial (PREVENT). Am J Cardiol. 2002 Oct 1;90(7):776-8. No abstract available. PMID: 12356398 [PubMed - indexed for MEDLINE] 33: Chou TC, Yang SP, Pei D. Related Articles, Links Amlodipine inhibits pro-inflammatory cytokines and free radical production and inducible nitric oxide synthase expression in lipopolysaccharide/interferon-gamma-stimulated cultured vascular smooth muscle cells. Jpn J Pharmacol. 2002 Jun;89(2):157-63. PMID: 12120758 [PubMed - indexed for MEDLINE] 34: van de Poll SW, Delsing DJ, Jukema JW, Princen HM, Havekes Related Articles, Links LM, Puppels GJ, van der Laarse A. Raman spectroscopic investigation of atorvastatin, amlodipine, and both on atherosclerotic plaque development in APOE*3 Leiden transgenic mice. Atherosclerosis. 2002 Sep;164(1):65-71. PMID: 12119194 [PubMed - indexed for MEDLINE] 35: Casciano R, Doyle JJ, Chen J, Arikian S, Casciano J, Kugel H, Related Articles, Links Arocho R.

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disease. Pharmacoeconomics. 2002;20(8):553-63. PMID: 12109920 [PubMed - indexed for MEDLINE] 36: Cathomas G, Erne P, Schwenkglenks M, Szucs TD. Related Articles, Links The economic efficiency of amlodipine in the treatment of coronary atherosclerosis--an analysis based on the PREVENT study. Cardiovasc Drugs Ther. 2002 Jan;16(1):61-6. PMID: 12085980 [PubMed - indexed for MEDLINE] 1 37: Sima A, Stancu C, Constantinescu E, Ologeanu L, Simionescu M. Related Articles, Links The hyperlipemic hamster - a model for testing the anti-atherogenic effect of amlodipine. J Cell Mol Med. 2001 Apr-Jun;5(2):153-62. PMID: 12067498 [PubMed - indexed for MEDLINE] 138: Mancini GB, Miller ME, Evans GW, Byington R, Furberg CD. Pitt Related Articles, Links B; PREVENT Study Group. Prospective randomized evaluation of the vascular effects of norvasc. Post hoc analysis of coronary findings from the prospective randomized evaluation of the vascular effects of the Norvasc trial (PREVENT). Am J Cardiol. 2002 Jun 15;89(12):1414-6. No abstract available. PMID: 12062738 [PubMed - indexed for MEDLINE] 39: Prisant LM. Related Articles, Links Verapamil revisited: a transition in novel drug delivery systems and outcomes. Heart Dis. 2001 Jan-Feb;3(1):55-62. Review. PMID: 11975770 [PubMed - indexed for MEDLINE] 1 40: Doyle JJ, McGuire A, Arocho R, Arikian S, Casciano J, Svangren Related Articles, Links P. Casciano R, Kim R, Kugel H. A cost-effectiveness evaluation of amlodipine usage in patients with coronary artery disease in Sweden. Int J Clin Pract. 2002 Mar, 56(2):76-81. PMID: 11926709 [PubMed - indexed for MEDLINE] 1 41: Lai YM, Fukuda N, Su JZ, Suzuki R, Ikeda Y, Takagi H, Tahira Y, Related Articles, Links Kanmatsuse K Novel mechanisms of the antiproliferative effects of amlodipine in vascular smooth muscle cells from spontaneously hypertensive rats. Hypertens Res. 2002 Jan;25(1):109-15. PMID: 11924715 [PubMed - indexed for MEDLINE] 42: Williams C. Related Articles, Links Amlodipine PREVENTS angina, not atherosclerosis. Pharmacotherapy. 2002 Mar;22(3):400-1; discussion 401-2. No abstract available. PMID: 11898898 [PubMed - indexed for MEDLINE] 43: Mason RP. Related Articles, Links Mechanisms of atherosclerotic plaque stabilization for a lipophilic calcium antagonist amlodipine. Am J Cardiol. 2001 Nov 21;88(10A):2M-6M. Review. PMID: 11705416 [PubMed - indexed for MEDLINE] **44:** Mason RP. Related Articles, Links Mechanisms of plaque stabilization for a charged calcium channel blocker in coronary artery disease.

Pharmacotherapy. 2001 Sep;21(9 Pt 2):209S-215S. Review.

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PMID: 11560191 [PubMed - indexed for MEDLINE]

45: Pieper JA. Related Articles, Links Management of coronary heart disease risk factors and progression with calcium channel blockers. Pharmacotherapy. 2001 Sep;21(9 Pt 2):195S-208S. Review. PMID: 11560190 [PubMed - indexed for MEDLINE] 46: Vijayagopal P, Subramaniam P. Related Articles, Links Effect of calcium channel blockers on proteoglycan synthesis by vascular smooth muscle cells and low density lipoprotein--proteoglycan interaction. Atherosclerosis. 2001 Aug; 157(2):353-60. PMID: 11472734 [PubMed - indexed for MEDLINE] 47: Goldstein MR. Related Articles, Links Does amlodipine increase cancer incidence? Circulation. 2001 Jul 10;104(2):E5. No abstract available. PMID: 11447095 [PubMed - indexed for MEDLINE] 48: Ferdinand KC. Related Articles, Links Update in pharmacologic treatment of hypertension. Cardiol Clin. 2001 May; 19(2):279-94, v. Review. PMID: 11407110 [PubMed - indexed for MEDLINE] 49: Vita JA, Yeung AC, Winniford M. Related Articles, Links Coronary artery reactivity after treatment with simvastatin. Curr Atheroscler Rep. 2001 Mar;3(2):105-8. No abstract available. PMID: 11177653 [PubMed - indexed for MEDLINE] 50: Eleuteri E. Related Articles, Links [Effect of amlodipine on the progression of atherosclerosis and the occurrence of clinical events] Ital Heart J Suppl. 2001 Jan;2(1):85-6. Italian. No abstract available. PMID: 11216089 [PubMed - indexed for MEDLINE] 51: Tulenko TN, Sumner AE, Chen M, Huang Y, Laury-Kleintop L, Related Articles, Links Ferdinand FD. The smooth muscle cell membrane during atherogenesis: a potential target for amlodipine in atheroprotection. Am Heart J. 2001 Feb; 141(2 Suppl): S1-11. Review. PMID: 11174352 [PubMed - indexed for MEDLINE] 52: Sobal G. Menzel EJ, Sinzinger H. Related Articles, Links Calcium antagonists as inhibitors of in vitro low density lipoprotein oxidation and glycation. Biochem Pharmacol. 2001 Feb 1;61(3):373-9. PMID: 11172743 [PubMed - indexed for MEDLINE] 53: Jeong MH. Park JC, Rhew JY, Kang KT. Lee SH, Cho JH, Kim Related Articles, Links NH, Kim KH, Ahn YK, Bae Y, Cho JG, Park JC, Kim SH, Kang Successful management of intractable coronary spasm with a coronary stent. Jpn Circ J. 2000 Nov;64(11):897-900. PMID: 11110439 [PubMed - indexed for MEDLINE] 54: Pitt B, Byington RP, Furberg CD, Hunninghake DB, Mancini GB, Related Articles, Links Miller ME, Riley W.

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Effect of amlodipine on the progression of atherosclerosis and the



occurrence of clinical events. PREVENT Investigators.

Circulation. 2000 Sep 26;102(13):1503-10.

PMID: 11004140 [PubMed - indexed for MEDLINE]

55: Zannad F.

Related Articles, Links

[Effects of calcium antagonists on atherosclerosis progression and intima media thickness]

Drugs. 2000;59 Spec No 2:39-46. French.

PMID: 11002857 [PubMed - indexed for MEDLINE]

56: Marche P.

Related Articles, Links



[Amlodipine and the mechanisms of vascular hypertrophy]

Drugs. 2000;59 Spec No 2:1-7. Review. French.

PMID: 11002853 [PubMed - indexed for MEDLINE]

57: Thaulow E, Jorgensen B.

Related Articles, Links



Results and clinical implications of the CAPARES trial.

Can J Cardiol. 2000 Jul; 16 Suppl D:8D-11D.

PMID: 10932030 [PubMed - indexed for MEDLINE]

58: Mancini GB.

Related Articles, Links



Overview of the prospective randomized evaluation of the vascular effects of Norvasc (amlodipine) trial: PREVENT.

Can J Cardiol. 2000 Jul;16 Suppl D:5D-7D. Review. PMID: 10932029 [PubMed - indexed for MEDLINE]

☐ 59: Tardif JC.

Related Articles, Links



Insights into oxidative stress and atherosclerosis.

Can J Cardiol. 2000 Jul;16 Suppl D:2D-4D. Review. PMID: 10932028 [PubMed - indexed for MEDLINE]

60: Follath F.

Related Articles, Links



[Ischemic vs nonischemic heart failure--does etiology matter?]

Ther Umsch. 2000 May;57(5):321-3. Review. German. PMID: 10859992 [PubMed - indexed for MEDLINE]

61: Ikeda U, Hojo Y, Ueno S, Arakawa H, Shimada K

Related Articles, Links



Amlodipine inhibits expression of matrix metalloproteinase-1 and its inhibitor in human vascular endothelial cells.

J Cardiovasc Pharmacol. 2000 Jun;35(6):887-90. PMID: 10836722 [PubMed - indexed for MEDLINE]

62: Koshiyama H. Tanaka S. Minamikawa J.

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Related Articles, Links



Effect of calcium channel blocker amlodipine on the intimal-medial thickness of carotid arterial wall in type 2 diabetes.

J Cardiovasc Pharmacol. 1999 Jun;33(6):894-6. PMID: 10367592 [PubMed - indexed for MEDLINE]

63: Henderson J. Fox KM.

Related Articles, Links

Can calcium antagonists reverse atherosclerosis? Eur Heart J. 1999 Jul;20(13):927-9. No abstract available. PMID: 10361043 [PubMed - indexed for MEDLINE]

64: Warnholtz A, Nickenig G, Schulz E, Macharzina R, Brasen JH, Skatchkov M, Heitzer T, Stasch JP, Griendling KK, Harrison DG, Bohm M, Meinertz T, Munzel T

Related Articles, Links



Increased NADH-oxidase-mediated superoxide production in the early stages of atherosclerosis: evidence for involvement of the renin-angiotensin

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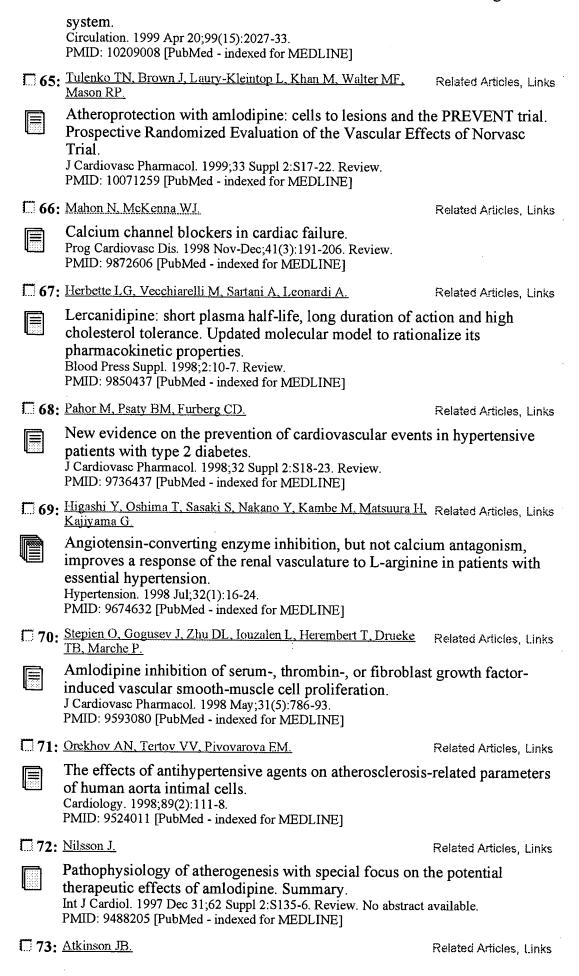
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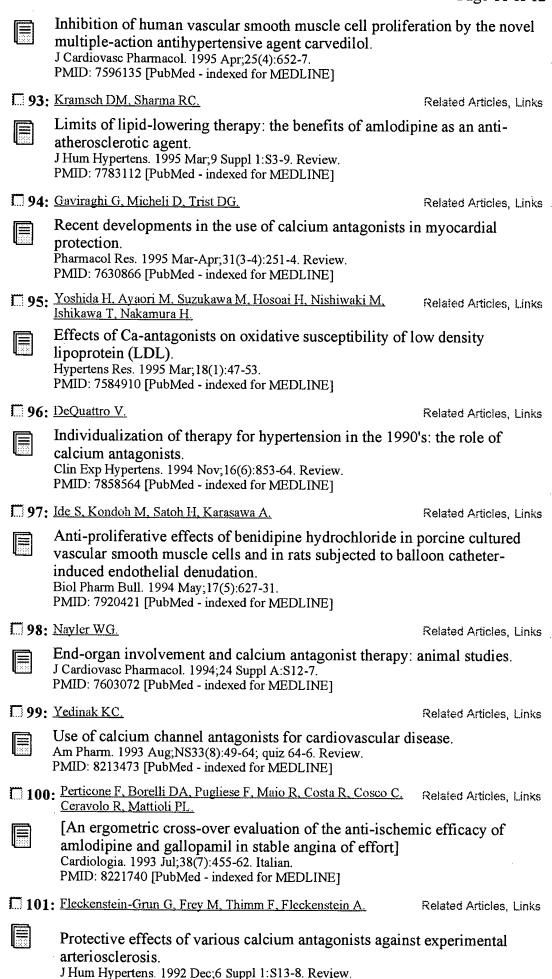
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	Limits of lipid-lowering therapy: the potential benefits of antiatherosclerotic agent. Int J Cardiol. 1997 Dec 31;62 Suppl 2:S119-24. Review. PMID: 9488203 [PubMed - indexed for MEDLINE]	f amlodipine as an
□ 75:	Woodman OL, Hart JL, Sobey CG.	Related Articles, Links
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□76:	Schachter M.	Related Articles, Links
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□ 78:	Orekhov AN, Tertov VV, Sobenin IA, Akhmedzhanov NM, Pivovarova EM.	Related Articles, Links
	Antiatherosclerotic and antiatherogenic effects of a calcistatin combination: amlodipine and lovastatin. Int J Cardiol. 1997 Dec 31;62 Suppl 2:S67-77. PMID: 9488197 [PubMed - indexed for MEDLINE]	um antagonist plus
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□81:	Marche P, Herembert T, Zhu DL.	Related Articles, Links
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□82:	Schwartz A.	Related Articles, Links
	Pathophysiology of atherogenesis with special focus on therapeutic effects of amlodipine. Introduction. Int J Cardiol. 1997 Dec 31;62 Suppl 2:S1-2. Review. No abstract ave PMID: 9488188 [PubMed - indexed for MEDLINE]	

□ 83:	Singhal PC, Sagar P, Gupta S, Arya M, Gupta M, Prasad A, Loona R, Sharma P, Mattana J	Related Articles, Links
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□84:	Byington RP, Miller ME, Herrington D, Riley W, Pitt B, Furberg CD, Hunninghake DB, Mancini GB.	Related Articles, Links
	Rationale, design, and baseline characteristics of the Pro- Randomized Evaluation of the Vascular Effects of Norv (PREVENT). Am J Cardiol. 1997 Oct 15;80(8):1087-90. PMID: 9352986 [PubMed - indexed for MEDLINE]	spective asc Trial
□ 85:	Chen L. Haught WH. Yang B. Saldeen TG. Parathasarathy S. Mehta JL.	Related Articles, Links
	Preservation of endogenous antioxidant activity and inhiperoxidation as common mechanisms of antiatherosclerovitamin E, lovastatin and amlodipine. J Am Coll Cardiol. 1997 Aug;30(2):569-75. PMID: 9247534 [PubMed - indexed for MEDLINE]	bition of lipid otic effects of
□ 86:	Melcher A, Dens J, Curry P, Hagel H.	Related Articles, Links
	Nisoldipine CC: clinical experience in ischaemic heart d Cardiology. 1997;88 Suppl 1:17-23; discussion 24-5. Review. PMID: 9118164 [PubMed - indexed for MEDLINE]	isease.
□ 87:	Suzuki M, Ikebuchi M, Shinozaki K, Hara Y, Tsushima M, Matsuyama T, Harano Y.	Related Articles, Links
	Mechanism and clinical implication of insulin resistance Diabetes. 1996 Jul;45 Suppl 3:S52-4. PMID: 8674891 [PubMed - indexed for MEDLINE]	syndrome.
□ 88:	Harano Y, Suzuki M, Shinozaki K, Hara Y, Ryomoto K, Kanazawa A, Nishioheda Y, Tsushima M.	Related Articles, Links
	Clinical impact of insulin resistance syndrome in cardiovand its therapeutic approach. Hypertens Res. 1996 Jun;19 Suppl 1:S81-5. PMID: 9240771 [PubMed - indexed for MEDLINE]	ascular diseases
□89:	Roth M, Eickelberg O, Kohler E, Erne P, Block L.H.	Related Articles, Links
	Ca2+ channel blockers modulate metabolism of collagen extracellular matrix. Proc Natl Acad Sci U S A. 1996 May 28;93(11):5478-82. PMID: 8643600 [PubMed - indexed for MEDLINE]	s within the
□ 90:	Paoletti R. Corsini A. Soma MR. Bernini F.	Related Articles, Links
	Calcium, calcium antagonists and experimental atherosci Blood Press Suppl. 1996;4:12-5. Review. PMID: 8973776 [PubMed - indexed for MEDLINE]	erosis.
□ 91:	Brogden RN, Sorkin EM.	Related Articles, Links
	Isradipine. An update of its pharmacodynamic and pharm properties and therapeutic efficacy in the treatment of mi hypertension. Drugs. 1995 Apr;49(4):618-49. Review. PMID: 7789292 [PubMed - indexed for MEDLINE]	nacokinetic ld to moderate
□ 92:	Patel MK, Chan P. Betteridge LJ, Schachter M, Sever PS.	Related Articles, Links

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□ 102:	Nayler WG.	Related Articles, Links
	The antiatherogenic effects of amlodipine: promise of p J Hum Hypertens. 1992 Dec;6 Suppl 1:S19-23. PMID: 1284082 [PubMed - indexed for MEDLINE]	reclinical data.
□ 103:	Nayler WG.	Related Articles, Links
	Vascular injury: mechanisms and manifestations. Am J Med. 1991 Apr 25;90(4B):8S-13S. PMID: 1826808 [PubMed - indexed for MEDLINE]	
□ 104:	Nayler WG, Gu XH.	Related Articles, Links
	Vascular and myocardial effects of amlodipine: an over Postgrad Med J. 1991;67 Suppl 5:S41-3. PMID: 1839439 [PubMed - indexed for MEDLINE]	view.
□ 105:	Nayler WG, Gu XH.	Related Articles, Links
	Protecting the vasculature: an eye toward the future. Am J Cardiol. 1990 Nov 20;66(18):23H-27H. PMID: 2147359 [PubMed - indexed for MEDLINE]	
□ 106:	Kloner RA, Przyklenk K.	Related Articles, Links
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□ 107:	Fleckenstein A, Frey M, Zorn J, Fleckenstein-Grun G.	Related Articles, Links
	Amlodipine, a new 1,4-dihydropyridine calcium antagor particularly strong antihypertensive profile. Am J Cardiol. 1989 Nov 7;64(17):21I-34I. PMID: 2530884 [PubMed - indexed for MEDLINE]	nist with a
□ 108:	Opie LH.	Related Articles, Links
	Calcium channel antagonists. Part III: Use and compara hypertension and supraventricular arrhythmias. Minor in Cardiovasc Drugs Ther. 1988 Mar;1(6):625-56. Review. PMID: 3154329 [PubMed - indexed for MEDLINE]	tive efficacy in adications.
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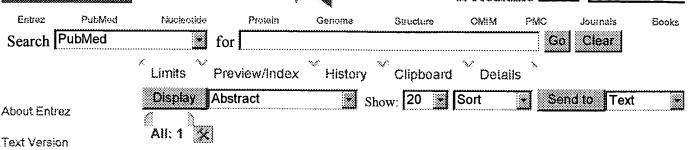
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The antiatherogenic effects of amlodipine: promise of preclinical data.

Nayler WG.

Department of Medicine, University of Melbourne, Austin Hospital, Heidelberg, Victoria, Australia.

Atherosclerosis is a complex and multifactorial disease, the endpoint of which is the formation of a calcified plaque. Intermediate events include intimal injury, smooth muscle cell proliferation and migration, macrophage infiltration, lipid accumulation and excess formation of ground substance. To determine whether the newly developed, long-acting calcium antagonist, amlodipine, slows the development of atherosclerotic lesions under experimental conditions, young New Zealand white rabbits were fed on a diet of 2% cholesterol plus 1% peanut oil for up to 12 weeks. Half the rabbits received 1 or 5 mg amlodipine/kg body weight/day. Amlodipine caused a significant and dose-dependent reduction in lesion formation in the thoracic aorta. At the same time thoracic aorta Ca2+ and cholesterol content were maintained at near normal levels, despite the raised plasma cholesterol levels. The protective effect of amlodipine persisted throughout a treatment period of 12 weeks, indicating the absence of tachyphylaxis.

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Antibody 24822.111
Antibody F9
Eotaxin: eotaxin-2, eotaxin-3 but NOT Eotaxin-1
RNA ADR7
RNA ADR22
Eotaxin-3
Amlodipine

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FILE 'VETB', ENTERED AT 17:02:31 ON 08 FEB 2005 COPYRIGHT (C) 2005 THE THOMSON CORPORATION

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MEDICONF, NUTRACEUT, PCTGEN, PHAR, PHARMAML, PROUSDDR, RDISCLOSURE, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
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        ***Antagonists***
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      Gong, Jiang-Hong; Clark-Lewis, I*
CS
      Biomed. Res. Cent.
                          2222 Health Sci. Mall, Univ. British Columbia,
      Vancouver, BC V6T 1Z3, Canada
      Journal of Experimental Medicine [J. EXP. MED.], vol. 181, no. 2, pp.
SO
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     Monocyte chemoattractant protein-3, but not monocyte chemoattractant
     protein-2, is a functional ligand of the human monocyte chemoattractant
     protein-1 receptor.
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```
ΑU
     Franci C; Wong L M; Van Damme J; Proost P; Charo I F
     Gladstone Institute of Cardiovascular Disease, San Francisco, CA 94110,
CS
NC
     HL52773 (NHLBI)
     JOURNAL OF IMMUNOLOGY,
                                ***(1995 Jun 15)***
SO
                                                        154 (12) 6511-7.
     Journal code: 2985117R. ISSN: 0022-1767.
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     Journal; Article; (JOURNAL ARTICLE)
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     Signal transduction and ligand specificity of the human monocyte
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     chemoattractant protein-1 receptor in transfected embryonic kidney cells.
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     Myers S J; Wong L M; Charo I F
     Gladstone Institute of Cardiovascular Disease, San Francisco, California
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SO
     JOURNAL OF BIOLOGICAL CHEMISTRY,
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     Mammalian monocyte chemoattractant protein receptors and cDNAs encoding
     them and their therapeutic use
Charo, Israel; Coughlin, Shaun
IN
PA
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SO
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      Mammalian monocyte chemoattractant protein receptors
      Charo, I. (Univ. California, Oakland, CA 94612-3550, USA)
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PCT Patent Appl. ( ***1995*** ) WO 9519436(Appl. US 08/182962 Filed 13
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      DNA encoding monocyte chemo-attractant protein-1 receptor - used partic.
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IN
      Charo I; Coughlin S
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PA
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                        Novel Approaches to Inflammation Intervention at LeukoSite
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SOURCE:
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WORD COUNT:
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     5-Bi phenylyl tetrazole cpd. prepn. for angiotensin ***antagonist***
intermediate - by reacting fluorophenyl tetrazole with Grignard reagent,
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     MURRAY, W V; RUSSELL, R
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MEDICONF, NUTRACEUT, PCTGEN, PHAR, PHARMAML, PROUSDDR, RDISCLOSURE, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
'LY' IS NOT VALID. VALID FILE NAMES ARE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOBUSINESS, BIOSIS, You have entered a file name of duplicates to keep that is not
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Please enter one of these file names.
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     under way; Tenidap data on slowing bone erosion in ***rheumatoid***
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ΑU
     F-D-C Reports - "The Pink Sheet", ( ***1995*** ) Vol.57, No.44, Oct. 30,
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     TRAITEMENT DE LA POLYARTHRITE RHUMATOIDE REFRACTAIRE PAR LA CICLOSPORÎNE.
ΑU
     Flipo R.M.; Cortet B.; Duquesnoy B.; Delcambre B.
     Service de Rhumatology, Hopital B, CHRU,59037 Lille Cedex, France Revue de Medecine Interne, (1994) 15/3 (166-173).
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     Drug Therapy, (1993) 23/3 (55-58+63).
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ΔIJ
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TI
      Marketletter March 8, 1993
SO
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      Newsletter
      459
WC
L9
     ANSWER 10 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     93:14786 PHIN
     S00376488
DN
DED
     1 Oct 1993
TI
     Slowdown in Finnish pharmaceutical spending in 1992
     Scrip ( ***1993*** ) No. 1860 p5
S0
DT
     Newsletter
FS
     FULL
L9
     ANSWER 11 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     93:3704 PHIN
ΑN
DN
     s00353790
     9 Mar 1993
DED
     Pfizer reviews upcoming filings
TI
     Scrip ( ***1993*** ) No. 1801 p11
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DT.
     Newsletter
     FULL
FS
L9
     ANSWER 12 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
ΑN
     92:11209 PHIN
     s00318962
DN
     14 Aug 1992
Pfizer riding high on investor confidence
DED
TI
     Scrip ( ***1992*** ) No. 1744 p8
SO
DT
     Newsletter
FS
     FULL
L9
     ANSWER 13 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     92:8452
AN
              PHIN
DN
     S00313362
     19 Jun 1992
Pfizer's largest filing - tenidap?
Scrip ( ***1992*** ) No. 1728 p25
DED
ΤI
SO
DT
     Newsletter
FS
     FULL
     ANSWER 14 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     91:12851 PHIN
ΑN
     S00280114
DN
DED
     19 Jul 1991
     329 Pharmaceutical Manufacturers Association (PMA) drugs in development
TI
     for the aging
Scrip ( ***1991*** ) No. 1635 p24
SO
DT
     Newsletter
     FULL
FS
```

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ANSWER 15 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
L9
AN
     91:8387
              PHIN
     s00278350
DN
     26 Jun 1991
DED
TT
     Recent drug approvals for Pfizer worldwide
     Scrip ( ***1991*** ) No. 1628 p24
S0
DT
     Newsletter
FS
     BRIEF
     ANSWER 16 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
L9
     91:1549
ΑN
              PHIN
     s00262034
DN
DED
     11 Jan 1991
     Pfizer's best Research & Development (R&D) pipeline ever Scrip ( ***1991*** ) No. 1581 p12
ΤI
SO
     Newsletter
DT
FS
     FULL
L9
     ANSWER 17 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     89:17085 PHIN
AN
DN
     s00203198
     9 Jun 1989
DED
     Pfizer's ***amlodipine*** - 1st s
Scrip ( ***1989*** ) No. 1419 p24
                 ***amlodipine*** - 1st approval
TI
SO
DT
     Newsletter
     FULL
FS
L9
     ANSWER 18 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     89:957 PHIN
ΑN
     S00222444
DN
DED
     8 Dec 1989
TI
     Drugs for the US elderly
     Scrip ( ***1989*** ) No. 1471 p30
SO
DT
     Newsletter
FS
     FULL
L9
     ANSWER 19 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     88:15724 PHIN
ΑN
DN
     s00164570
DED
     1 Jul 1988
TT
     Short-term problems for Pfizer?
     Scrip ( ***1988***
S<sub>0</sub>
                           ) No. 1324 p8
DT
     Newsletter
FS
     FULL
L9
     ANSWER 20 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
AN
     88:682
             PHIN
DN
     S00152630
DED
     21 Mar 1988
     Pfizer's new anti-inflammatory
TI
SO
     Scrip ( ***1988*** )
                              No. 1294 p12
DT
     Newsletter
FS
     FULL
L9
     ANSWER 21 OF 24 PHIN COPYRIGHT 2005 T&F Informa UK Ltd on STN
     86:13036 PHIN
ΑN
DN
     500102047
DED
     10 Dec 1986
TI
     Products in the news in 1986
     Scrip ( ***1986*** ) No. 1166/7 p11
S0
DT
     Newsletter
FS
     FULL
L9
     ANSWER 22 OF 24 PROMT COPYRIGHT 2005 Gale Group on STN
ACCESSION NUMBER:
                     93:531562 PROMT
                     PFIZER "COMMITTED" TO HEALTH CARE AND R&D
TITLE:
                     Marketletter, ( ***8 Mar 1993*** ) pp. N/A.
SOURCE:
                     ISSN: 0140-4288.
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LANGUAGE: English WORD COUNT: 45Ŏ *FULL TEXT IS AVAILABLE IN THE ALL FORMAT* L9 ANSWER 23 OF 24 PROMT COPYRIGHT 2005 Gale Group on STN 92:544296 PROMT ACCESSION NUMBER: TITLE: Pfizer-Eleven New Products: Near Term Pipeline Impressive SOURCE: Genesis Report-Rx, (***Dec 1991***) pp. N/A. ISSN: 1061-2270. LANGUAGE: English WORD COUNT: 1355 *FULL TEXT IS AVAILABLE IN THE ALL FORMAT* L9 ANSWER 24 OF 24 USPATFULL ON STN 95:114762 USPATFULL AN Inhibition of arthritis by L-type calcium channel antagonists TI nimodipine, nisoldipine and nifedipine IN Aune, Thomas M., Hamden, CT, United States Bayer Corporation, Pittsburgh, PA, United States (U.S. corporation) PA US 5478848 US 1994-188464 ΡI 19951226 ΑI 19940126 (8) Utility DT FS Granted **LN.CNT 537**

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INCL INCLM: 514/356.000
INCLS: 514/355.000
NCL NCLM: 514/356.000
NCLS: 514/355.000

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